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Hon'ble Prime Minister,

Lok Kalyan Marg

New Delhi

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On behalf of the Ministry of Environment, Forests, and Climate Change, ~~the~~ we the undersigned would like to draw your attention to concerns surrounding air quality in New Delhi and its surrounding National Capital Region (NCR). It has been known for some time the ~~concerns~~ ^{situation} surrounding poor quality of air in the region, a figure ~~magnifi~~ magnified when considering pollution levels during the popular festival of Diwali. We would like to propose here a legislation aiming at improving the general situation of matters, by regulating the use and sale of firecrackers during in the region.

For reference, we shall be ~~bring~~ off of the Supreme Court Judgment of 23rd October 2019, a Civil Original Jurisdiction in response to multiple writ petitions over three years prior. We also highlight points raised by IA No. 4 in Writ Petition (Civil) No. 728 of 2015, (Arjun Gopal and others vs. Union of India and others), and the CPCB Deepawali Monitoring Report, 2016.

To motivate our plea for legislation, we would like to refer to our Brief Statement (2018). Due to extensive efforts and collaborations (Clean Air Campaign) with the Government of Delhi, we achieved 159 \leq moderate days (AQI \leq 150 - wise)

in 2018 as opposed to 152 in 2017.^[17] The effort included prevention of stubble burning in neighbouring states, implementing an odd-even policy for private vehicles, and sensitizing the general public and ground-level functionaries. This is a motivating example we can use as a stepping stone to further legislation, potentially extending to the National Clean Air Program (NCAP) later on.

For purposes of legislation, we have made efforts to identify the stakeholders that may be affected by such action. We begin ~~long~~ with those that support a controlled, or even a total ban on, fire crackers.

(a) Elderly and Infants, who are ~~subje~~ particularly subject to ~~the~~ adverse effects of air pollution and are known to develop multiple health concerns, including but not limited to "aggravation of asthma", coughing, bronchitis, retarded nervous system breakdown and even cognitive impairment."^[23]

(b) Patients with pre-existing pulmonary conditions that can worsen with even a short-lived spike of air pollutants

(c) Cardiac patients suffering from worsening conditions due to sudden noise;

(d) Students and professionals hampered due to noise pollution that often extends beyond the festival itself on both sides.

At heart, the problem is an environmental one - the argument is that the burst of firecracker usage during the day or two drastically worsens the ~~air~~ Air quality of the region as evidenced by

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spikes in the AQI. This is a potential threat to the lives ~~of~~ and general health of various groups at an increased risk. — It was found that more than 40 ~~per~~ percent of school children suffer from lung damage ⁽³⁾. Thus, this ~~excess~~ ~~a~~ is construable as a violation of Individuals' Right to life, as well as basic Human Rights as per the UN ⁽⁴⁾.

Numbers supporting these claims are provided in I.A.NO.4 in writ Petition (Civil) No.728 of 2015, sourced from the CPCB Deepawali Monitoring Report, 2016. We provide snippets below:

PM 10 ($\mu\text{g}/\text{m}^3$) levels in Delhi

STATION	2015		2016	
	PRE-DIWALI	DIWALI DAY	PRE-DIWALI	DIWALI DAY
ITO	166	531	203	878
PITAMPURA	161	460	368	1297
PARIVESH BHAWAN	166	543	329	1183

For some context, AQI Categories are given as:

AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr
Good	0-50	0-30
Satisfactory	51-100	31-60
Moderately Polluted	101-250	61-90
Poor	251-350	91-120
Very Poor	351-430	121-250
Severe	431-530+	250+

PM 2.5 ($\mu\text{g}/\text{m}^3$) levels in Delhi

STATION	2015		2016	
	PRE-DIWALI	DIWALI DAY	PRE-DIWALI	DIWALI DAY
ITO	NA	NA	104	797
PITAMPURA	117	435	102	1236
PARIVESH BHAWAN	96	474	84	958

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From the tables above, we observe ^{a drastic} ~~an~~ increase of pollution in 2016 - Diwali. Looking at PM-10 data, it may seem due to higher pre-diwali levels, but PM-2.5 data reveals another story - a strong case for limiting firecracker use in the NCR.

On the other side of the argument are multiple parties - represented in legislation primarily by ~~the~~ industry. To identify them,

- (a) Individuals wishing to burst firecrackers, as an exercise of their right to liberty
- (b) Indic Collective (applicant M IA No. 105355 of 2017) contends that burning of crackers in Diwali is a religious activity; to deny that would be to take away the freedom to practice one's religion.
- (c) The fire cracker industry, bringing up major oppositions, as expressed in the 2018 SC judgement
 - (i) Burning of crackers during Diwali does not have any significant adverse effect on the environment. Based on the CPCB Deepavali Monitoring Report of 2017, it contended that the quality of air was "generally" worsening, but no spike observed on the day itself. ~~however~~
 - (ii) Related, the presence of PM2.5 ~~was~~ spiked momentarily, and was manageable
 - (iii) No empirical study existed showing any adverse effects of firecrackers on the atmosphere during Diwali
 - (iv) The revenue generation by the industry was to the tune of ₹ 6000 crore per annum, providing employment to over

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5 lakh families. Shutting down the industry would be taking away their rights to livelihood.

Evidently, a balanced approach must be taken to the matter. Even keeping aside the ~~debate~~ claim of PM2.5's transient existence, the point about economic impact has real impacts that should be considered. To not overhaul the industry in the long term would be a foolish, Luddite-ish approach - but a general phasing out is not out of the question. As it stands, measures are to be taken.

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In order to handle the tensions we propose modifications, point 92 of the Supreme Court Judgement of October 23rd, 2018. We can split this into two categories: regulating the industrial supply chain, which is more enforceable, and public-level changes, that are less enforceable but can lead to better long-term results.

Regulating the supply chain:

- (a) Permit only crackers with reduced emissions, as specified in Suggestions II and III of the Judgement.
- (b) Banning the sale of joint firecrackers
- (c) Banning the sale of firecrackers on online portals like Amazon, Flipkart etc.
- (d) Certification of all ~~cracker~~ chemicals must be done by the Petroleum and Explosives Safety Organisation (PESO). Chemicals like sulphur must be banned.
- (e) No certification of temporary or short term licenses for the sale of firecrackers.

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- (f) A cap on the ~~import~~ overall sale of the crackers in Delhi, under 50,00,000 kg.

Public level Policy:

- (a) Government campaigns informing the public and ground-level functionaries of the harm caused by crackers to the environment and to their own well-being.
- (b) Limitations on noise pollution imposed by the Judgement of July 18, 2005 by the SC would apply yet.
- (c) A time-restriction on the permissible bursting of fire crackers; but instead of the proposed 8-10, ~~to~~ ^{PM} 7-10:30 PM.
- (d) A half-an-hour community fireworks show to ensure conformation to regulations and prevent excessive celebrations in multiple individual private celebrations.
- (e) Restrictions on firing crackers within 100m of a hospital / school / orphanage.

• The general trend of the legislation tends towards the petitioners of the case in the SC. We quote a paragraph as justification;

"There is no doubt that protecting citizens (including those who use fireworks) by making

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An, being a concern on the common list, has been
 a joint project of both the central and the state governments.
 The joint CAC campaign with the Gov. of Delhi has proven
 to be successful in the past, and we shall continue
 implementation of any such legislation ~~with~~ in
 partnerships.

(a) Monitoring the industry. Due to the localised nature of the industry, ~~the~~ ~~to the~~ ~~the~~ this falls under the purview of the Ministry of Micro, Small and Medium Enterprises (MSME). The effort shall need to be a joint venture.

(b) Public Land Campaigns: Enforcing the policies through a police force needs the intervention of the Union Minister, under the Central Govt.

(c) Public Information Campaign: Information would need to be
done with help of State Gov

Notwithstanding, we are willing to make some compromises to get the deal pushed through

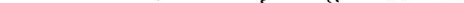
(a) \rightarrow Carbon fireworks.

(3) Sale of crackers online

References:

- [1] MORE Bing Statement, 2016.

- (2) SC Judgment of 23rd Oct, 2018

- 3) 

- (2) LA. No. 4 IN WRIT PETITION (CIVIL) No. 728 of 2015