• Implementation of Air Quality Early Warning System for Delhi in October, 2018 in association with Ministry of Earth Sciences (MoES). The system provides timely alerts to implementing agencies for facilitating proactive actions.

Technical Interventions

- Pilot projects were deployed in Delhi for evaluation of air pollution mitigation technologies:
 - Ambient air purification through Wind Augmentation and Purification Units (WAYUs) for pollution abatement at traffic intersections and Pariyayantra filtration units on 30 buses was evaluated. Though minimal improvement in ambient air quality was observed, however, WAYU may be explored for providing improved air quality at localised levels.
 - Application of dust suppressant -The effectiveness of the dust suppressant lasted up to 6 hours after which it had to be reapplied. About 30% reduction in dust concentrations was observed up to 6 hours. Advisory has been issued to State Boards to use dust suppressant.
- Research projects are being carried out by CPCB in collaboration with premier institutions like IIT, NEERI, etc. under Environment Protection Charge (EPC) funds.
- Lack of certification system of ambient air quality monitoring instruments in India
 was identified. A certification scheme has been established in collaboration with
 National Physical Laboratory (NPL).
- Regular engagements with technical bodies and experts have been undertaken for knowledge sharing.

Ban on charcoal as fuel or raw material

1490. SHRI R. VAITHILINGAM: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether it is a fact that Government has not yet amended the notification on Wood Based Industries (Establishment and Regulation) Guidelines, 2016 to check illegal cutting of trees for making charcoal;
 - (b) if so, the reasons therefor;
- (c) whether it is also a fact that Government is considering to ban the use of charcoal as fuel or raw material in industries across the country; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BABUL SUPRIYO): (a) and (b) The Government *vide* Gazette Notification No. S.O. 955(E) dated 22nd February, 2019 has amended Wood Based Industries (Establishment and Regulation), Guidelines, 2016 to regulate wood based charcoal industries.

(c) and (d) There is no such proposal.

Restrictions on use of Hookah

1491. SHRI R. VAITHILINGAM: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether it is a fact that Government is considering to examine the effect of hookah in respect of indoor air pollution and prescribe appropriate standards on the issue;
 - (b) if so, the details thereof;
- (c) whether it is also a fact that Government lacks jurisdiction to restrain the use of hookah in restaurants and bars in the cities; and
 - (d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BABUL SUPRIYO): (a) to (d) Studies such as Weitzman et. al., 2016 demonstrate potentially hazardous levels of home air pollution in rooms where hookahs were being smoked as well as in adjacent rooms. PM_{2.5} levels were also elevated in hookah smoking homes compared to cigarette and non-smoking homes, although not significantly different. CO was also significantly greater in rooms where hookahs were smoked than in the cigarette-smoking rooms and non-smoking households. In addition, CO levels in rooms adjacent to where hookah was smoked were 2.5-folds to 4-folds greater than those in the smoking and non-smoking rooms of cigarette smoking homes. Building the specific guidelines and protocols on monitoring and management of indoor air pollution is a component under National Clean Air Programme (NCAP) and a Committee on Indoor Air Pollution Management has been constituted by MoEF&CC to develop and finalize guidelines on monitoring and management of indoor air pollution.