

National Physical Laboratory (NPL), National Environmental Engineering Research Institute (NEERI), IIT Delhi and Central Pollution Control Board (CPCB) to discuss application of advanced technologies to deal with air pollution incidents and improve the overall air quality management.

(b) Establishing early warning system and dissemination protocol to inform public and enforcement agencies about episodic high pollution events in advance is amongst the priorities identified for improving management of air pollution. Government has considered various options in this regard, including use of satellite based Aerosol Optical Depth for estimating ground level  $PM_{2.5}$  levels.

(c) A certification system for air quality monitoring instruments and equipment in the country through CSIR - National Physical Laboratory has been mandated for certification of Online Continuous Emission Monitoring System (OCEMS) and Continuous Ambient Air Quality Monitoring System (CAAQMS).

#### **Scientific studies on air pollution and its effects on health**

\*60. SHRI VINAY DINU TENDULKAR: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether Government has carried out any scientific studies on air pollution and to determine its effects on health during the last three years and if so, the details thereof;

(b) if not, the reasons therefor and the details of measures that are intended to be taken; and

(c) the reasons for the standards of the Indian Pollution Index being less stringent as compared to the level of permissible pollution index issued by World Health Organisation?

THE MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. HARSH VARDHAN): (a) and (b) Indian Council of Medical Research (ICMR) under the Ministry of Health and Family Welfare, along with Public Health Foundation of India (PHFI) and Institute of Health Metrics and Evaluation (IHME), has published a report titled 'India: Health of the Nation's States', as part of India State-Level Disease Burden Initiative in November, 2017. The report documents that the contribution of air pollution to disease burden remained high in India between 1990 and 2016. Outdoor air pollution caused 6.4% of India's total Disability-Adjusted Life Years (DALY) in 2016, while household air pollution caused 4.8%. The study also States that DALY due to air pollution decreased by 23.6% from 1990 to 2016.

(c) The World Health Organization (WHO) Guidelines for ambient air quality, are designed to provide reliable guidance to policy makers across the world, whereas the National Ambient Air Quality Standards (NAAQS) is the country-specific standards which have been formulated by this Ministry on the basis of health based studies and Indian geo-climatic condition.

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## WRITTEN ANSWERS TO UNSTARRED QUESTIONS

### **Absorption of ex-apprentices of National Dockyard**

481. SHRI V. VIJAYASAI REDDY: Will the Minister of DEFENCE be pleased to state:

(a) whether the Eastern Naval Command is not considering to absorb unemployed ex-apprentices of National Dockyard; and

(b) the steps taken/proposed to take to rectify injustice, if any, done to them?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. SUBHASH RAMRAO BHAMRE): (a) and (b) No, Sir. HQ Eastern Naval Command has issued advertisement in Employment News dated 14-20 July, 2018 inviting applications for recruitment of 144 Tradesman (Skilled) from Ex. Naval apprentices.

### **Infrastructure development on North Western and North Eastern borders**

482. SHRI SAMBHAJI CHHATRAPATI: Will the Minister of DEFENCE be pleased to state:

(a) whether infrastructure development on North-Western and North-Eastern borders in form of all weather roads, modern helipads and aircraft landing stations, are far inferior in comparison to our neighbouring nations, to keep a striking balance;

(b) if so, the details thereof;

(c) whether Government has prioritized the infrastructure development of the area close to international border; and

(d) if so, the details thereof and the expenditure incurred during the last three years?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. SUBHASH RAMRAO BHAMRE): (a) and (b) No, Sir. The Government is fully seized of security needs of the country and reviews the same from time to time. Required