LPG etc.), ethanol blending; promotion of cleaner production processes; launching of National Air Quality index; universalization of BS-IV by 2017; leapfrogging from BS-IV to BS-VI fuel standards by 1st April, 2020; comprehensive amendments to various Waste Management Rules and notification of Construction and Demolition Waste Management Rules; banning of burning of leaves, biomass, municipal solid waste; promotion of public transport and network of metro, e-rickshaws, promotion of car pooling, Pollution Under Control Certificate, lane discipline, vehicle maintenance; regular co-ordination meetings at official and ministerial level with Delhi and other State Governments within the NCR; issuance of directions under Section 18(1)(b) of Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of Environment (Protection) Act, 1986; installation of on-line continuous (24x7) monitoring devices by major industries; collection of Environmental Protection Charge on more than 2000 CC diesel vehicles; and ban on bursting of sound emitting crackers between 10 PM to 6 AM etc.

Statement

List of Indian cities along with Average Air Quality index (from November 10, 2015 to October 2016)

Sl. No. Cities		Average AQI
1.	Delhi	246
2.	Faridabad	226
3.	Varanasi	223
4.	Lucknow	221
5.	Jaipur	216
6.	Kanpur	215
7.	Patna	208
8.	Muzzaffarpur	200
9.	Agra	199
10.	Jodhpur	189

## Burning of dry paddy hay in Punjab and Haryana

- 535. SHRI K.C. RAMAMURTHY: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:
- (a) whether it has come to the notice of the Ministry that nearly 100 million tonnes of dry paddy hay has been burnt in paddy fields of Punjab and Haryana;

- if so, the reasons therefor and the impact of such burning;
- (c) how the burning has impacted pollution levels of Delhi and other neighbouring cities; and
- (d) the steps the Ministry has taken or proposed to take to prevent such wasteful and harmful exercise of burning very essential fodder resource which is badly required in some other parts of the country?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI ANIL MADHAV DAVE): (a) As per the information furnished by Government of Punjab, residue generation from paddy is about 19.70 million tonnes (MT). Government of Haryana has reported that about 6.18 MT of paddy crop residue is generated per annum.

- (b) The main reasons for burning of dry paddy straw in Punjab and Haryana include the limited period available between harvesting of paddy and sowing of wheat and other crops, shifting from human labour to machines for harvesting, high cost involved in cutting and transportation of stubbles etc.
- There is no conclusive study available that burning of paddy crop residue in the States like Punjab and Haryana would always impact quality of air in the States/ UT like Rajasthan, Delhi etc. As per the Report of IIT, Kanpur, the back trajectory analyses suggest that the Crop Residue Burning and other biomass emissions may be transported to Delhi from the sources upwind of Delhi.
- (d) Stubble burning has been banned in Punjab and Haryana. Governments of Punjab and Haryana have been advised for strict implementation of the ban during the review meetings held by the Central Government. Various alternative uses of paddy straw have been taken up including setting up of bio-mass based power projects, pilot demonstration project for ethanol production and demonstration units for paddy straw based briquettes etc.

## Dumping of industrial waste on ground and water

- 536. SHRI KAPIL SIBAL: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:
- whether there are major health problems due to dumping of industrial waste on ground and in water bodies and if so, the details thereof;
- (b) the State/Union Territory-wise details regarding dumping of industrial waste on ground and in water bodies during the last three years; and