12.05 hrs.

Title: Statement regarding approval of use of Ethanol as Oxygenate in place of Ethyl Tertiary Butyl Ether (ETBE).

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI RAM NAIK): Sir, as the hon. Members are aware, the Ministry of Petroleum and Natural Gas has been making efforts to encourage the use of ethanol blended petrol (gasohol). I had made a *suo motu* statement in this august House in December 2001 on the success of the pilot projects and extending the use of gasohol to the entire country.

Simultaneously, the Ministry was also considering the feasibility of the use of Ethyl Tertiary Butyl Ether (ETBE) as oxygenate in petrol. ETBE is rated as a better oxygenate compared to Methyl tertiary Butyl Ether (MTBE).

The Ministry of Petroleum and Natural Gas had constituted a Committee of

Experts under the Chairmanship of Dr. S.J. Chopra, Executive Director, Centre for High Technology. This committee has concluded that the blending of ethanol with petrol is a better option as compared to blending of ETBE from the various aspects, namely, operational, financial, environmental, technical, logistics, etc. In addition, ethanol is a biodegradable product and can technically be blended upto 10 per cent in gasoline without effecting major changes in petrol engines. It has high octane number and better thermal efficiency. The committee has stated that blending of ETBE can be done at refineries only which involves huge cost for setting up of ETBE plants. Each such plant would cost about Rs.100 crore as against about Rs.30 to Rs.40 lakh for creating ethanol blending facilities at depots. This approach of using ethanol is less capital intensive and decentralised as depots are located all over India.

The decision to use ethanol as an oxygenate would, on the one hand, lead to its increased use and would also result in phasing out of the use of MTBE. In India, MTBE is being used as an additive to the petrol at two refineries – Mumbai refinery of Bharat Petroleum Corporation Ltd., and Koyali Refinery, Gujarat of India Oil Corporation Ltd. There has been a growing concern about the use of MTBE as oxygenate in petrol as it is reported to result in water pollution when it seeps into the ground water and gives unacceptable odour to the water. Incidentally, the US Senate has recently approved the phasing out of MTBE over four years.

Presently, ethanol is being blended in petrol in three pilot projects launched at Manmad and Miraj in Maharashtra and Bareilly in Uttar Pradesh. Further, blending at three more locations in U.P. (Gonda, Kanpur and Najibabad), two in Punjab (Bhatinda and Pathankot) and one in Andhra Pradesh (Rajahmundry) are planned. Government has already taken a decision to extend the blending of five per cent ethanol with petrol throughout the country in two phases. The first phase would cover the sugarcane growing States of Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh. The rest of the country would be covered in the second phase. To promote the use of ethanol in petrol, the Finance Minister has announced in the budget for the year 2002-03, an excise duty concession of Rs.0.75 per litre on petrol blended with ethanol.

Use of ethanol (five per cent) in petrol leads to better combustion and significantly lower emission of pollutants. For five per cent blending of ethanol with petrol on all India basis, about 500 million litres of ethanol would be required. The decision to use ethanol had been made in view of the advantages of use of ethanol accruing to the oil industry, sugarcane growing farmers and the environment. I am certain that the entire country would reap the benefits of this far-reaching decision.

(Placed in Library. See No. LT 5332/2002)

(Interruptions)