

**GOVERNMENT OF INDIA  
ENVIRONMENT AND FORESTS  
LOK SABHA**

UNSTARRED QUESTION NO:1840  
ANSWERED ON:04.08.2010  
CHEMICAL TOXICITY IN PUNJAB  
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**Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:**

- (a) whether the Government has conducted any survey regarding presence of chemical toxicity in the Bhatinda, Ferozepur and Faridkot districts of Punjab;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether the tanneries across border are also adding to contamination of water in river Satluj, making it not only unfit for drinking but also for irrigation; and
- (d) if so, the steps including diplomatic the Government has taken in this regard?

**Answer**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS(SHRI JAIRAM RAMESH)

(a) & (b) As reported by the Punjab Pollution Control Board an epidemiological study of cancer cases reported from villages of Talwandi Sabo Block, District Bhatinda and Chamkaur Sahib Block, District Roopnagar, Punjab was conducted by School of Public Health, Department of Community Medicine, PGIMR, Chandigarh in the year 2003-04. Limited studies showed that in drinking water the levels of heavy metals such as arsenic, cadmium, chromium, selenium and mercury were generally higher and pesticides such as heptachlor, ethion and chloropyrifos were also higher in samples of drinking water, vegetables and blood in Talwandi Sabo as compared to Chamkaur Sahib. It therefore, emerged that the cancer cases and deaths are higher in Talwandi Sabo due to more use of pesticides, tobacco and alcohol.

Another study regarding presence of Uranium in groundwater in Bhatinda District in collaboration with the Department of Physics, Punjab University, Chandigarh was undertaken. A total of 22 numbers of groundwater samples from hand pumps and tube wells were collected from various locations in Bhatinda District. The analysis results revealed that the concentration of Uranium in 4 out of 22 numbers of groundwater samples has Uranium concentration beyond the U.S. Environment Protection Agency limits.

It is further reported that the concentration of Uranium in samples of pulverized coal being used by Guru Nanak Dev Thermal Power Plant and dry flyash generated by the burning of pulverized coal collected from the electrostatic precipitator was less than 1 ppm and 2 ppm respectively which indicates that flyash may not be the potential source of Uranium contamination of groundwater.

(c) & (d) As reported by the Punjab Pollution Control Board, the possibility of addition to contamination in river Satluj by the effluent discharge from tanneries across the Border cannot be ruled out as the course of river Satluj passes through the territory of Pakistan where the tanneries are said to be located. The Board has been monitoring river Satluj along the international border at four points for the last three years. The analysis results at these points reveal that the water quality of river Satluj varies between class 'B' (outdoor bathing) to class 'C' (drinking water source after conventional treatment and disinfection) as per the Designated Best Use (DBU). The DBU for irrigation falls under Class 'E'.