



SCHOOL OF ENVIRONMENTAL STUDIES

To

The Teacher in Charge/Headmaster

Medudandi Suicegate SSK

Merudandi, Sangrampur, Basirhut 1, North 24 Parganas

Dated: 15th September, 2017

Sub: Analytical report of arsenic in school tubewells, domestic tubewells of school children and urine samples collected from the school children

Dear Sir,

Please find herewith the analytical results of arsenic concentrations in the water samples collected and supplied by your team from the school premises, dated 23rd March, 2017. The analytical results of the water samples collected from the domestic tubewells of the school children and urine samples, dated 18th May, 2017 is enclosed herewith (**Annexure-1**).

Sample ID	Arsenic ($\mu\text{g/L}$)
Medudandi Suicegate SSK	600
Do (MDM)	275

The analytical results clearly indicate that both the water samples contain high concentration of arsenic. The water samples collected from the domestic tubewells of the school children contain high concentration of arsenic (Annexure-1). The guideline and recommended values of arsenic in drinking water proposed by different organizations are as follows:

Organization	Guideline value ($\mu\text{g/L}$)	Recommended value ($\mu\text{g/L}$)
World Health Organization (WHO)	10	-
United States Environmental Protection Agency (USEPA)	-	10
Indian Standard	-	10

With respect to above standard values, both the water samples collected from the school premises are unsafe for drinking and cooking with respect to arsenic. One, out of 20 water samples collected from the domestic tubewells is safe (Sl. No. 23) with respect to the recommended value of arsenic in drinking water.

A considerable amount of arsenic was found in the urine samples collected from the school children. The normal level of arsenic in urine is 3-26 $\mu\text{g/L}$ and urinary arsenic indicates the recent exposure of arsenic. Thus, it clearly proves that the school children in the survey were/are drinking arsenic-contaminated water.

Supplement of arsenic free water is highly recommended. Installation of a deep tubewell/alternate source/Arsenic removal plant in the school premises is recommended for the purpose.

Sincerely yours,

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