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Leachates From The Wild Discharge Of El Hajeb City (Morocco): Analytical Assessment Of Quality Microbiological And Sanitary Risks

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Abstract : This study aims to determine the microbiological quality of leachate from the wild dump of the town of El Hajeb (Morocco) and its sanitary risks. In this investigation, monthly sixteen samples were collected during twenty-one months (May 2015–January 2017). Counts of total coliforms, fecal coliforms and faecal streptococci were carried out by the MPN method, while *E. coli*, salmonella spps, staphylococcus aureus, revivable germs at 22°C and at 37°C, sulphite-reducing clostridia at 46°C, helminth eggs, vibrio cholera and protozoal cysts were examined using standard microbiological methods of health protection.

Bacteriological and parasitological results indicated the presence of high levels in pathogenic microorganisms which exceeded the limits and guide values of WHO and the current Moroccan standards, what makes these effluents extremely toxic in the case of infiltration or diffusion towards the surface waters or the adjacent groundwater which circulates at shallow depth and could consequently expose the health of the neighboring population to grave sanitary risks.

Keywords : Leachate, Quality, Microbiology, Health risks.

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