

Status of Hazardous Waste Generation and Its Impacts on Environment and Human Health: A Study in West Bengal

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Abstract : The present study is an attempt to overview on the major environmental and health impacts due to hazardous waste generation and poor management. In present scenario, not only hazardous waste, but as a common term 'Waste' is one of the acceptable and thinkable environmental issues. With excessive increasing population, industrialization and standardization of human's life style heap in extra waste generation which is directly or indirectly related with hazardous waste generation. Urbanization and population growth are solely responsible for establishing industrial sector and generating various Hazardous Waste (HW) and concomitantly poor management practice arising adverse effect on environment and human health. As compare to other Indian state, West Bengal is not too much former in HW generation. West Bengal makes a rank of 7th in HW generation followed by Maharashtra, Gujarat, Tamil Nadu, U.P, Punjab and Andhra Pradesh. During the last 30 years, the industrial sectors in W.B have quadrupled in size, during 1995 there were only 440 HW generating Units in West Bengal which produced 129826 MTA hazardous waste but in 2011, it rose up into 609 units and it produced about 259777 MTA hazardous waste. So, the notable thing is that during a 15 year interval there increased 169 waste generating units but it produced about 129951 MTA of hazardous waste. Major chemical industries are the main sources of HW and causes of adverse effect on the environment and human health. HW from industrial sectors contains heavy metals, cyanides, pesticides, complex aromatic compounds (i.e. PCB) and other chemical which are toxic, flammable, reactive, and corrosive and have explosive properties which highly affect the surrounding environment and human health in and around the disposal sites. The main objective of present study is to highlight on the sources and components of hazardous waste in West Bengal and impacts of improper HW management on health and environment. This study is carried out based on a secondary source of data and qualitative method of research. The secondary data has been collected annual report of WBPCB, WHO's report, research paper, article, books and so on. It has been found that excessive HW generation from various sources and communities has serious health hazards that lead to the spreading of infectious disease and environmental change.

Keywords : environmental impacts, existing HW generation and management practice, hazardous waste (HW), health impacts, recommendation and planning

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