

Characterization of Biomedical Bottom Ash for Waste Management †

Aditi Singh ^{1,2}, Anil V. Shah ¹, Sunita Varjani ^{1,*}

¹ Gujarat Pollution Control Board, Gandhinagar - 382 010, Gujarat, India;

² Central University of Gujarat, Gandhinagar- 382030, Gujarat, India;

* Correspondence: drsvs18@gmail.com (S.V.);

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Abstract: Despite the fact that medical treatment is critical to our health and survival, the waste generated by its operations can be dangerous, harmful, and even lethal when compared to other types of waste. Thus, the management of biomedical waste has become imperative with the primary goal of disease prevention and environmental conservation. Biomedical waste in India is produced at a rate of 484 TPD (tonnes per day) by approximately 168869 healthcare facilities. The improper management of biomedical waste is damaging the economy and affecting the health of the hospital staff, patients and visitors, etc. Incineration is the most accepted treatment process for biomedical waste management since it reduces volume by more than 95 percent, but it has a significant downside in the form of bottom ash. This ash is hazardous in nature. In this study, bottom ash is analyzed to determine its toxicity potential and assess the available management options. More findings will be discussed.

Keywords: biomedical waste; waste management; solidification; stabilization.

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Conflicts of Interest

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