Safe Disposal of Sanitary Napkins (Mensuburner)

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On average, about 25,000 tons of sanitary waste is released daily. Due to the lack of proper disposal, these are found dumped in open areas and sometimes in the water bodies, leading to environmental and health issues. We conducted surveys and found that only 73% of the women used sanitary napkins. Due to the lack of cost-effective and efficient methods of disposal, these women opted for pollution-causing ways to discard off the napkins. Therefore, we analyzed the data, started experimenting in the lab, and finally came up with a machine named Mensuburner. We repeated the procedure, recorded the time it takes to turn into ash and gases, and hence modified the machine to make it more efficient. The 2000-watt coil provides an optimum temperature of 600 C above to completely burn the napkin. Ash that is left out can be used as a bio-fertilizer when mixed with jaggery, moringa, and neem leaves as the pH of the ash are neutral and contain three important elements: Nitrogen, Phosphorus, and Potassium. The gases released are passed through the chamber for purification. Harmful gases like carbon dioxide and sulphur dioxide are removed by different solutions of lime water and acidified Potassium Dichromate solution. Our model is also a DIY model. The weight of one napkin is reduced from 22g to 0.25g leading to a major impact on the disposal of menstrual waste. Thus, pollution caused due to improper disposal will be minimized as the machine is compact, eco-friendly, and ready to be installed.

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