

Technical Brief No. 2 on Menstrual Hygiene Safe Disposal

Informing Standards Development for Small-scale Incinerators Frequently Deployed in Shared & Public Spaces (India)

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Background: Incinerator technologies as a feasible menstrual waste management solution for urban India

With increasing sanitary pad use, incinerators are a popular technology solution to handling menstrual waste in institutional settings such as schools, as well as in community and public toilet sites. Incinerator technologies in India vary widely, and include simple fuel-assisted burning chambers made of brick, tin or terracotta, small-scale electric incinerators, large and mid-sized commercial electric incinerators, and bio-medical incinerators.

In India, incinerators are gaining in popularity as they potentially offer a complete on-site menstrual waste management solution. While incineration requires that menstrual waste is separated from other solid waste for treatment, it need not always involve the various steps required for solid waste management in terms of transportation of segregated waste, secondary segregation, storage, treatment and final disposal. Further, given the socio-cultural norms around seeing and handling menstrual blood, incinerators are one solution to minimize handling of such waste.

Incinerators, however, pose certain health and environmental related risks and challenges. With the lack of regulatory standards for small and medium scale incinerators in India, many of the incinerators available in the market do not adhere to sound design principles and do not incorporate emission control measures to reduce toxic emissions. Often times, small scale incinerators are placed in closed spaces (within the toilet complex) or near the toilet, where by emissions can pose a threat to health. Many incinerators are installed with limited training of operators on how to run the machine and how best to maintain it. Anecdotal evidence suggests that small electric incinerators quickly become dysfunctional and cease to serve their purpose. Socio-cultural norms associated with burning of menstrual blood-born products can influence the use of incinerators directly by users and by operators, and need to be considered when installing such technologies.

Informing Government Standards for Small Scale Incinerators for Menstrual Waste Management

Two activities organized by WaterAid / India have been undertaken as a part of this task order: 1) roundtable with MHM and public health experts; 2) policy dialogue with the Bureau of Indian Standards (BIS)

1) Roundtable with menstrual health and hygiene sector experts

This roundtable was held to share study findings from the shared and public facilities work, and to discuss whether and how incinerators are a safe and feasible menstrual waste management solution in urban India, and arrive at a consensus on standards for small and mid-sized incinerators (agenda below).

A total of 17 organizations attended the October 2018 round table, including a representative from the Bureau of Indian Standards (participant list included). Key discussion points were as follows:

- Roundtable experts concurred with the study findings that cloth and disposal pads are discarded without wrapping
- Evidence from other projects and organizations suggests that even when paper is made available in toilet complexes, girls and women do not wrap used products in paper. Education on proper disposal is critical to ensure safe disposal, and is often not part of MHM interventions.
- Other studies have also noted that even when women had individual household latrines, they still preferred to discard in public toilets – public toilets therefore seem to provide more distant or discrete disposal opportunities.
- While dustbins with lids and swing covers are preferred by most, it does not take into consideration the needs of those who are differently-abled, especially the visually impaired that those with physical disabilities. For differently-abled girls and women, open dustbins are preferred. The needs of differently-abled girls and women needs to be factored into menstrual waste solutions in urban public sites, particularly in public toilets where there are separate toilets for the differently-disabled.
- Organizations had mixed views on incinerators, expressing like for their efficiency and social acceptability. The most significant challenges with incinerators were related to their poor design that led to their breakdown or inoperability, and social norms related to burning of menstrual blood-borne products.
- Menstrual waste management must be considered along the waste value chain – and discussion of collection mechanisms as well. Any pilot program on menstrual waste should be integrated into a larger solid waste management system to be efficient.
- The roundtable proposed key recommendations for efficient management of menstrual waste:
 - Position effective menstrual waste management as promoting the efficient functioning of toilets and sewerage systems
 - Work on influencing procurement guidelines for incinerators at the State and National levels, and with large corporate facility operators

- For existing incinerators, retrofitting steps can be taken in terms of ensuring proper ventilation, duct work, appropriate stack height, and positioning of incinerators
- Consider conducting a study on existing incinerators installed by state/district administration, functioning, maintenance issues, and related procurement.
- Develop operations and maintenance guidelines for small-scale incinerators
- Develop standards for small-scale incinerators to address health, safety and performance guidelines. Existing standards are not appropriate as they address large-scale incinerators.
- Develop and share good case studies of gender responsive toilet designs that includes attention to MHM
- Consider service models that includes caretakers and appliance service agreements

Roundtable on Menstrual Hygiene Waste Management (October 2018)

Agenda:
Overview of the project and rationale
Brief overview of the waste stream
Briefs insights on user perspectives
Perspectives from the field – what types of incinerators have organizations seen in the field? What works? What are the issues?
Why incinerators can be considered a waste management solution <ol style="list-style-type: none"> 1. Testing of new incinerator designs 2. Prototype 3. Standards
Programmatic implication and inputs
Policy implications and inputs
Next steps

Participants

1. Biomass Controls
2. RTI International (India)
3. DASRA
4. Aga Khan Foundation
5. CFAR
6. PLAN India
7. UNICEF
8. Tata Trusts
9. Vatsalya Foundation, Baroda
10. Development Solutions
11. Zariya
12. WSSCC
13. WASH United
14. Social Alpha
15. Bureau of Indian Standards / Textile Division
16. Aakar Innovations
17. WaterAid India

2) Informing standards for small-scale incinerators by working

This activity was undertaken with the Bureau of Indian Standards (BIS), the Government agency tasked with the development of health, safety and performance standards. This policy influencing work has comprised of preparing recommendations for standards for small scale incinerators, and participation in meetings organized on this issues by BIS. The recommendations for small-scale incinerators for menstrual waste will include the following:

1. Clearly defined scope of incinerators – to burn what types of sanitary pads (composition of sanitary pads to be specified)
2. Major components of the equipment
3. Dimensions and capacity
4. Constructional parameters
5. Emission standards
6. Performance parameters
7. Guidelines on ash disposal
8. Methods and tests for emissions and performance
9. Annexure on handling guidelines, O&M, settings for placement, frequency of quality checks