

MENSTRUAL WASTE MANAGEMENT

A SIMPLE GUIDE

What is Menstrual Waste?

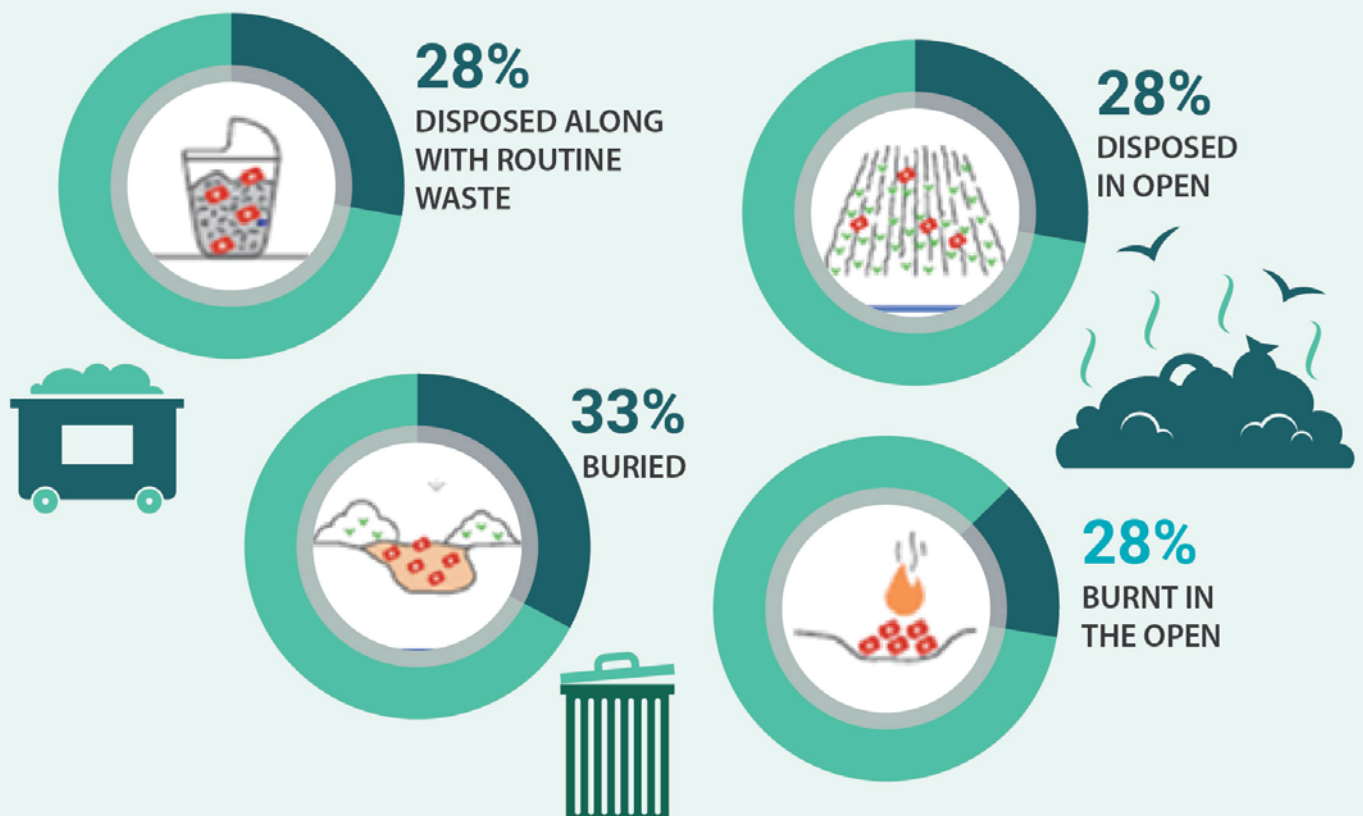
- ❖ Menstrual waste comprises of menstrual absorbents soiled with blood and human tissue remnants. Menstrual hygiene products include cloth, sanitary napkins and other materials used to absorb collect/menstrual blood.
- ❖ Solid Waste Management Rules (2016) consider menstrual waste as sanitary waste under solid waste. Rules specify responsibilities of users, GPs and manufacturers.

Menstrual Waste Load in India



PRODUCT CATEGORY	NON – COMPOSTABLE/ DISPOSABLE SANITARY NAPKINS	COMPOSTABLE PRODUCTS	REUSABLE PRODUCTS
Products	<ul style="list-style-type: none"> ❖ Without Super Absorbent Polymer (SAP) ❖ With SAP in absorbent core 	<ul style="list-style-type: none"> ❖ Compostable sanitary napkins 	<ul style="list-style-type: none"> ❖ Cloth pad variants ❖ Menstrual cups
Life span	<ul style="list-style-type: none"> ❖ One time use ❖ 800–900 years to decompose 	<ul style="list-style-type: none"> ❖ One time use ❖ 3–6 months to decompose 	<ul style="list-style-type: none"> ❖ Multiple use ❖ 1–10 years
Quality standards	<ul style="list-style-type: none"> ❖ Parameters – BIS IS 5405 (currently under revision) 	<ul style="list-style-type: none"> ❖ Performance and hygiene parameters – BIS IS 5405 (currently under revision) ❖ Compostability – IS 5404 (currently under revision) OR ISO 17088 from a Govt. authorized testing facility 	<ul style="list-style-type: none"> ❖ BIS standards for both currently under development

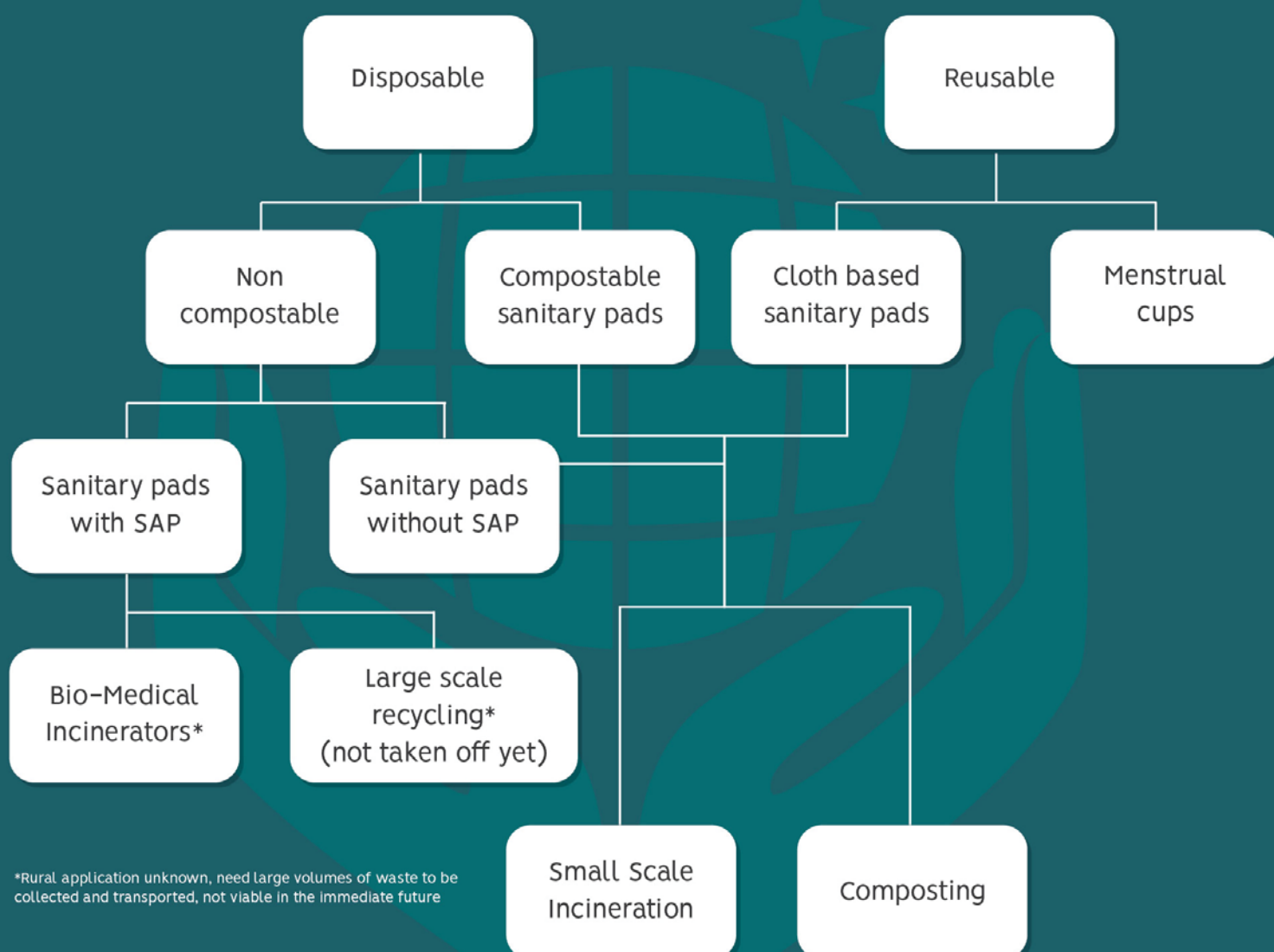
Where are the 12 billion pads being disposed?



Options for Menstrual Waste Management

- ❖ Many sanitary pads are manufactured using materials such as super absorbent polymers, non biodegradable plastic, glue etc. due to which they take up to 500 – 800 years to decompose. When large quantities of non-compostable waste ends up in fields and water bodies, it can cause long term deterioration of water and soil quality. Blood soiled menstrual absorbents are best culture medium for disease causing pathogens hence if these get disposed untreated in the environment there is risk of building a reservoir of pathogens in the environment.
- ❖ Use of menstrual hygiene products is closely related to waste disposal. Promotion of disposable napkins with little attention to safe waste management will be detrimental to the environment and to users

Waste management solutions according to type of products being used or promoted:



*Rural application unknown, need large volumes of waste to be collected and transported, not viable in the immediate future

SMALL SCALE INCINERATION

- ❖ Various types of small scale incinerators exist in India (tin, matkas, brick and electrical) which differ greatly in operation, capacity, quality, and emission control
- ❖ Appropriate for sanitary napkins without SAP, sanitary napkins that are certified compostable and cloth pads
- ❖ Combustion at high temperatures (above 800 degree Celsius) to convert waste into relatively harmless gases and incombustible solid waste (e.g., ash)
- ❖ Gases are released into the atmosphere after emission control measures and residual ash can be collected and disposed in designated ash pits or controlled landfills without any major risk
- ❖ Can be used at community or institutional level – process for collection, transportation of waste should be defined if incinerator not installed in/near toilet
- ❖ When incineration occurs in unsafe conditions, hazardous (carcinogenic) gases like dioxins and furans can be released i.e. poorly constructed structures, low burning temperatures, insufficient waste volume, poor emission control and inappropriate waste or waste improperly segregated
- ❖ To minimize negative impact, these should be noted:
 - ⊙ Optimum waste volumes are required for proper combustion – hence design should account for number of users and estimated waste volume
 - ⊙ Should be located outside the toilet complex and away from student areas (for schools and hostels)
 - ⊙ Constructed with appropriate materials, single or dual chamber, stack of appropriate height to minimize gases
 - ⊙ Should meet emission standards as specified by Central and State Pollution Control Boards
 - ⊙ Designated roles/processes for O&M – who will operate/when, how will ash be removed/disposed

COMPOSTING

- ❖ Process of complete degradation due to biological processes which yields carbon dioxide, water and other inorganic compounds in a defined period of time, without visible, distinguishable or toxic residue
- ❖ Appropriate for sanitary napkins without SAP, sanitary napkins that are certified compostable and cloth pads. Plastic is not compostable i.e. takes 800–900 years to break down
- ❖ Regular compost pits, bio-digesters, vermi composting possible composting solutions
- ❖ Can be undertaken at household, community or institutional levels
- ❖ Pits/digester dimensions must be according to amount of waste and can be covered with a sheet to stop excessive water and trap the heat for faster composting. Organic materials need to be added to facilitate decomposition.
- ❖ Potential technical resource partners NGOs having subject matter expertise.
- ❖ Products claiming compostability should be tested according to parameters being developed by BIS (as Annexure to IS 5405) or ISO 17088
- ❖ Oxo-biodegradable products are NOT compostable, only break down into micro plastics

Key Activities for SBM Mission Director and District Collector/CEO leading SLWM initiatives

	MISSION DIRECTOR	DISTRICT COLLECTOR/CEO
Products	Issue Office Order for DM/DC/CEOs to include Menstrual Waste Management into SLWM and issue guidelines on the following:	Use guidelines issued by Mission Director to guide the following:
Menstrual hygiene products	<p>Issue guidelines for ensuring access to menstrual hygiene products and orient relevant line department (such as Health, State Livelihood Mission, Education). Guidelines for Sanitary napkins procurement should be in accordance with</p> <ul style="list-style-type: none"> ❖ BIS IS 5405 ❖ Waste management solution selected /being considered for the state ❖ For composting or incineration, only sanitary napkins WITHOUT SAP should be procured ❖ If sanitary napkins with SAP are procured, waste management through Bio Medical Incinerators is advised or the used products to be sent back to the manufacturer for processing/recycling. 	<ol style="list-style-type: none"> 1. Assess the current use of and need for menstrual products in the district in consultation with key departments such as Health, Women and Child Development, and Education. 2. Based on the need for menstrual hygiene products, ensure procurement at the district level (through relevant line department) is carried out in line with: <ul style="list-style-type: none"> ❖ BIS IS 5405 ❖ Waste management solution selected/being considered for the district or select waste management solution in line with the menstrual hygiene products being procured
Incinerators	Issue guidelines for the procurement and installation of incinerators in accordance with Central and State Pollution Control Boards guidelines	<ol style="list-style-type: none"> 1. In consultation with other relevant departments (Health, Women and Child development, Education), discuss the need for incinerators as the waste management solution in schools, anganwadis and communities. 2. Based on the above, develop a procurement plan and procure incinerators in line with guidelines issued and in accordance with State Pollution Control Boards guidelines
Composting	Issue guidelines for procurement and installation of composting technologies in accordance with Considerations mentioned	Implement composting technologies in line with guidance issued

	MISSION DIRECTOR	DISTRICT COLLECTOR/CEO
Waste collection	Issue guidelines for collection, storage and transportation of menstrual waste from community to bio-medical incinerator facility where the district chooses to procure sanitary napkins with SAP and implement this option	Develop and implement a plan for the collection, storage and transportation of menstrual waste from community to the nearest bio-medical incinerator facility (likely attached to the District Hospital or teaching hospital)
Capacity building	Organize state orientation workshop for all relevant line departments working on MHM in the state to arrive at a common understanding and roadmap for dealing with menstrual waste	Organize a district level orientation workshop with all relevant stakeholders (Health, NRLM/Livelihood Generation, Education, PRI) on how menstrual waste management can be incorporated into ongoing SLRM initiatives, discussing in depth how product use in the district is linked with waste management solutions, and exploring the most appropriate and safe options for menstrual waste management.
Budgetary allocations	<p>In guidelines for menstrual waste management, recommend budgetary allocations for Infrastructure for menstrual waste management:</p> <ol style="list-style-type: none"> 1. Incinerators (household/community/institution) 2. Composters, composting pits etc. (household/community) 3. Collection cost if community solution is offered 4. Collection and transportation costs if WITH SAP products and accordingly, bio-medical incinerators are selected <p>Recommend budgetary allocations for IEC: 1) Understanding menstrual waste, 2) Awareness of different types of products and their impact on the environment, 3) Addressing menstrual myths and taboos to ensure participatory discussion on finding solutions for menstrual waste management</p>	<p>In line with the guidance from the Mission Director, and the decisions made related to menstrual hygiene products to be procured and the appropriate waste management solution identified, allocate budgets for product procurement, waste management technology, and training of relevant stakeholders.</p> <p>Examine budgets of all relevant departments to identify where budgets for waste management can be allocated.</p>
Convergence/ coordination	Serve as the nodal agency at the state level to encourage coordination across departments working on menstrual hygiene	At the district level, ensure coordination between all district level officials engaged in menstrual hygiene programs under leadership of District Collector/ Chief Development Officer/ CEO of ZillaPanchayat

FOR MORE INFORMATION CONTACT:

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