

Incinerator for School Toilet Waste

Case Study: Tamil Nadu



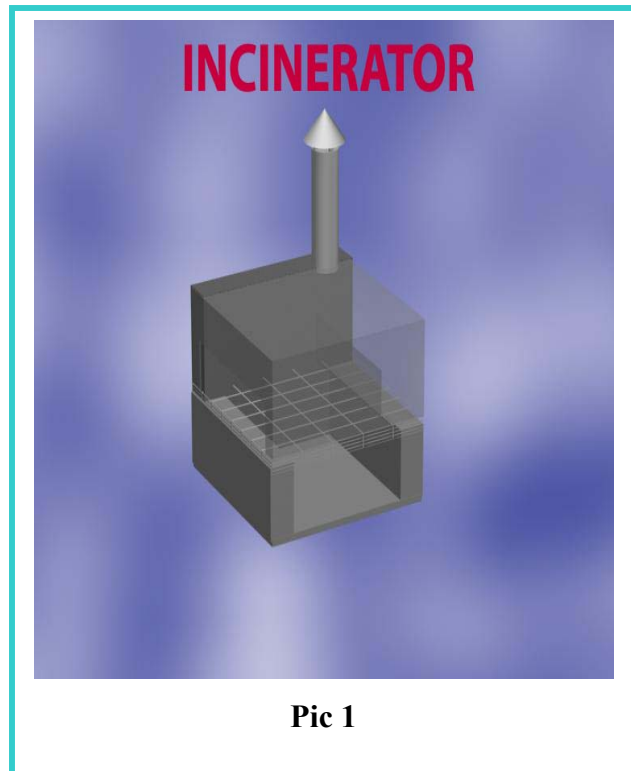
**Rajiv Gandhi National Drinking Water Supply
Department of Drinking Water Supply
Ministry of Rural Development
Government of India**

Use of Incinerator for School Toilet Waste

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Introduction

The Total sanitation campaign has brought about a welcome change in the rural areas in the improvement of sanitation facilities in the villages including other institutions like schools, anganwadies, health centres etc. In rural areas, with increasing sanitation coverage in all these institutions, the disposal of waste is becoming a serious problem. Both biodegradable and non biodegradable waste can prove hazardous for health, if proper and complete disposal is not done. In schools especially, disposal of



sanitary cloth and sanitary napkins in girls' toilets is big problem. It affects the proper functioning of the toilets when disposed in the toilet and serious health problems if thrown out in garbage dumps or in the open. There is, thus an imminent need to address this important sanitary waste disposal effectively especially in terms of developing cost effective and simple technology for composite waste disposal for schools.

In Tamil Nadu, innovative low cost technology incinerator has been developed for proper disposal of sanitary wastes. This design is simple, safe and cost effective. It



Pic 2

has already been installed in many rural schools and women sanitary complexes. The **incinerator** burns/incinerates wastes like soiled cloth, cotton waste, sanitary napkins, paper towels etc. The waste gets converted into ash and other non-hazardous residues. The incinerator is user friendly and manually operated. The cost of this technology is not very

high which is around Rs.1200-1500/- only (See annexure 1 for detail cost break up). The incinerator comprises of two chambers, an emission control system along with a door for firing and removal of ash. In each incinerator, there is a spout/opening in the toilet wall for disposal of soiled napkins into the chamber (as shown in picture 2).



Pic 3

The soiled napkin drops on the wire gauze in the chamber on the other side of the toilet wall (as showing in picture 3). This dropped napkin and other waste are fired on weekly basis through the door /firing inlet in the lower chamber (as shown in the picture 4). The entire incinerator is attached to the outer wall of the toilet. A smoke vent is provided for the disposal of gaseous substances while firing the sanitary wastes.



Pic 4

This simple addition to the toilets is highly appreciated by girls and teachers. The use of incinerator has removed the inhibitions among girls on attending schools during menstruation and has made them comfortable attending the school during those days. There are also no blockages of toilets due to sanitary waste disposal into the toilets. With such low investment required for incinerators, schools can

install such technology in toilets for better disposal of sanitary waste to check health hazards and subsequently ensure clean toilets and healthy learning environment for children especially girls. For more details, please contact Mrs. P. Amudha, Project Officer, UNICEF, Email: pamudha@unicef.org

Annexure 1

The detail break up of the cost of incinerator

SI.No.	Materials	Required Nos.	Rate	Amount
1	Country Bricks	250 nos	1.25	313.00
2	Cement	2 bags	150 / bag	300.00
3	Sand	-	150	150.00
4	Weld wire Mesh	9 sqft	9.50	85.00
5	Cuddapah Slab	12 sqft	15.00	180.00
6	Labour Charges Mason and Mazdoor		200.00	200.00
7	Cost of AC pipe 6 feet length, cover pipe, camp, nail		150.00	150.00
8	White washing, Colour, Washing and Painting, Lettering and Photo charges		122.00	122.00
	Total			1500.00

Note: The cost will work out to **Rs 1,200/-** if the basement of the toilet complex is the ground level.