

Long term solution to address the problems of hazardous waste management

Name of the team members

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Introduction and Justification

With the expansion of the service the amount of hazardous waste generated in the hospital has increased over past few years. It was a challenge to manage those waste with the existing resources in a safe manner. The only available method was the incineration of the waste, but it caused environmental problems and it was not cost effective. To overcome those challenges, we were able to produce new incinerator with added advantages at low cost.

Project report

Objectives:

1. To incinerate the daily production of hazardous waste in one or two cycles.
2. To minimize the fuel consumption.
3. To minimize the smoke and ash production.
4. To minimize the environmental pollution.

Study Period



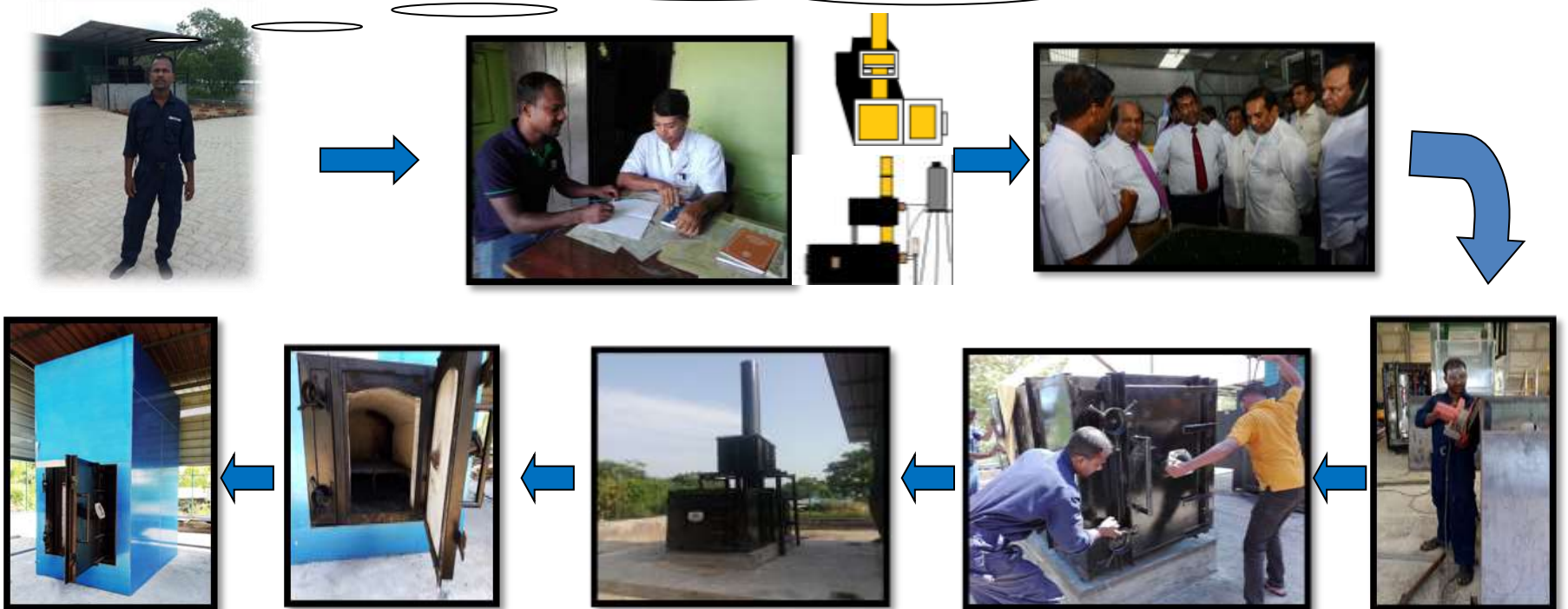
Mediburn 2011
Fuel 15 l/one hour
capacity 3'x4'x 3
OUT OF ORDER



I840A 2017
Fuel 15 l/one hour
capacity 2 1/2 'x2 1/2 '
In working condition

Resources at that moment

I can do it . I have knowledge and experience



Discussion

I8/40A Incinerator (Used one)	Intervention (New Incinerator)
Capacity - 30kg / one programme	Capacity - 120kg / one programme
Fuel - 15 l/ one program	Fuel - 15l/ one programme
Temp.- 600 ⁰ c - 800 ⁰ c	Temp.- 800 ⁰ c - 1000 ⁰ c
Number of programme - 204kg / 30kg	Number of programme - 204kg / 120kg
Around - 06 programme	Around - 02 programme
Fuel wastage - 15 l x 6 Program = 90 l/day	Fuel wastage - 15 l x 2 Program = 30l/day
Smoke - Normal Amount	Smoke - Low Amount
Ash Production - 30kg → 10kg	Ash Production - 100kg → 5kg

Conclusion and Way forward

With the new incinerator we were able to manage our daily production of hazardous waste with minimum damage to environment and in cost effective manner.