



Issue: Turbo Burners

Raised by: Ongoing inadequate management of clinical waste.

Background: Waste management, especially the management of clinical waste (for definition, see 4.4 of [Waste Management](#)), has long been a difficult area for remote health centres to achieve satisfactory standards. Historically, clinical waste has been handled in a variety of ways: burnt in the open or in 44 gallon drums near the health centre, buried 'out bush', dumped at the local waste facility, or transported back to regional centres with complicated and costly storage and freight arrangements. Each of these mechanisms present varying degrees of OH&S risk to staff and community along with potential environmental and cost implications.

The relatively recent emergence of turbo burners ([photos](#)) as a possible solution to better manage clinical waste in remote health centres is of interest. What is Remote Health's stance on the implementation of turbo burners?

Discussion: Turbo burners have been installed in a number of remote communities through the Renal project, to facilitate adequate disposal of waste generated by haemodialysis. Feedback from those sites has been an important contribution in generating a Branch standpoint on turbo burners.

It is apparent that while turbo burners have great potential for more adequate management of clinical waste in Remote Health, a range of factors affect the degree to which a burner may be useful in a given site. Following are the basic issues that should be considered before deciding to install a turbo burner in a given site:

- The adequacy, cost, and complexity of existing practice around managing clinical waste must be understood and balanced against requirements of turbo burner installation and maintenance.
- A suitable location to operate the turbo burner is required, including access to a power supply, a fenced area (permanent preferred to transportable) that safely isolates the turbo burner in use, a clear area - to reduce fire risk (concrete slab preferred), location mindful of prevailing winds, surrounding buildings etc., and availability of suitable fire safety equipment.
- A secure protected storage location is required. The ideal will be a dedicated shed opening directly to the fenced area.
- Responsible staff who have received the required basic training must be available to operate the turbo burner safely and efficiently. Training is required to ensure safe and efficient burns. Full time attendance while the burner is in use is not mandated providing the turbo burner is safely isolated. However, the operator must be available to monitor the burn over 1-2 hours. Drivers/gardeners will usually be the appropriate operator; clinicians should not generally assume this role. The PHCM will need to ensure operators are appropriate to the task and receive training. Basic [operating instructions](#) provide an overview of what is involved in operating the turbo burner, although training requires more involved tuition.
- Cost will vary according to existing infrastructure, but installation in a remote location, inclusive of satisfactory safety and storage requirements, will possibly be \$20,000 – 30,000.
- A turbo burner can be expected to handle all of a health centre's clinical waste, and possibly some additional waste (e.g. confidential documents, where appropriate) but will not generally manage all waste that is generated.

Further detail on the above factors is available on request from the Remote [Quality and Safety team](#).

Consultation: Julie Barnes (DHF Renal Project Manager); Neil Scholer (Principal, Scholer Industries); Peter Rodgers (Snr Policy Officer, DHF Environmental Health Unit); PHCMs in sites currently using Turbo burners.

References: [Scholer Industries – Turbo Burners](#); [Environmental Health Fact Sheet – Turbo Burners](#); Turbo Burner Trial Report (DHCS Internal report, 2008)

See also Section 6 of [Atlas – Waste Management](#) for further references regarding waste management standards.

Outcome: **Turbo Burners are supported in principle for use by Remote Health Centres.**

DHF Remote Health Centres contemplating the purchase of a turbo burner must consider all the requirements noted above, as well as whether there is sustained capacity to utilise the equipment.