

ENVIRONMENTAL HEALTH FACT SHEET

No. 500

DESTRUCTION, REMOVAL OR REUSE OF SEPTIC TANKS, COLLECTION WELLS, AERATED WASTEWATER TREATMENT SYSTEMS AND OTHER ON-SITE WASTEWATER SYSTEMS

This fact sheet provides information regarding the destruction, removal or reuse of septic tanks, collection wells, aerated wastewater treatment systems (AWTS). The content for this fact sheet was sourced from NSW Health.

UNDER NO CIRCUMSTANCES ARE SEPTIC TANKS, COLLECTION WELLS, AWTS, ETC TO BE REUSED AS VESSELS FOR HOLDING WATER FOR INTERNAL HOUSEHOLD DOMESTIC PURPOSES WHERE PEOPLE MAY COME INTO CONTACT WITH, AND CONSUME THE WATER.

As reticulated sewerage progresses through an area and premises connect to the sewer, existing septic tanks, collection wells and AWTS become redundant. These on-site wastewater systems may be demolished or reused on-site as a storm water storage vessel. There is also potential for these systems to be sold second hand and reinstalled.

The existing septic tank, where suitable, may also be used when the premises is upgraded to an AWTS installation.

Where it is feasible to reuse a septic tank, collection well, or AWTS, there are several precautions that need to be observed to ensure there is minimal danger to public health. The reuse and/or removal of a septic tank, collection well or AWTS shall only be carried out after the premises are connected to sewer or an alternate septic tank system.

One of the following methods should be employed or where another use is intended the intent of the guidelines should be met.

SEPTIC TANK / COLLECTION WELL: DEMOLITION ON-SITE

- The contents of the septic tank / collection well are to be removed by a method acceptable to Environmental Health, either by tanker removal to an appropriate site or pumped into the existing disposal trench which then should be sealed.
- The sides, lid, baffle (if fitted) and square junctions of the tank should be hosed down as the waste is being removed.
- The tank is to be disinfected by broadcasting Builders' (Hydrated) Lime over the exposed surfaces.
- Several holes should be punched into the base of the tank. The lid and those parts of the walls, baffle and square junctions above the ground should be demolished and collapsed into the tank and the tank filled with clean soil or rubble and topped with clean soil.
- The disposal trench may require remediation in accordance with the above requirements, pending if it is damaged or has collapsed over time.

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SEPTIC TANK AND COLLECTION WELL: REUSED ON-SITE AS A STORM WATER STORAGE & IRRIGATION TANK

- The water from such a stormwater or irrigation tank may be used for toilet flushing, and garden purposes but not for topping up swimming pools or internal household uses in the laundry, bathroom or kitchen where water can be consumed.
- For reuse on site as a non-domestic water containing vessel the contents are to be removed either a site acceptable to Environmental Health or pumped into the existing disposal trench, which then should be sealed.
- The sides, lid, baffle (if fitted) and square junctions of the tank should be hosed down as the waste is being removed.
- The tank should be filled with fresh water and disinfected to a minimum level of 5 mg/L of free residual chlorine with a half hour contact time. The chlorine should be allowed to dissipate naturally and not be neutralised.
- The inlet(s) and outlet(s) may be sealed. Pumps and other accessories may then be installed and connected to an irrigation system. The tank is to be mosquito proofed and fitted with a strainer to prevent the introduction of coarse materials.
- The tank is to be labelled as containing water unfit for human consumption.
- Pipes, fittings or fixtures in accordance with the water supply authority requirements may only be used. No cross connection is to be made with any potable water supply, nor should the vessel be likely to contaminate any potable water supply. Backflow prevention devices may need to be installed in accordance with the water supply authority directions.
- Any overflow is to be directed to the storm water discharge or as specified by Environmental Health.

SEPTIC TANKS: UPGRADING TO AWTS

An existing septic tank may be used in conjunction with an AWTS on the same site provided:

- the existing septic tank is of at least the same size and capacity of the septic tank of the type approved AWTS
- the existing septic tank is not to be relocated elsewhere on the same site
- the contents of the septic tank are to be removed either to a site acceptable to Environmental Health or pumped into the existing disposal trench
- the septic tank when inspected by a competent person such as the installer or a plumber is found to be in a suitable condition and in conformity with AS/NZS 1546.1:1998
- written approval of Environmental Health to alter the on-site wastewater system is to be obtained.

SEPTIC TANKS AND COLLECTION WELLS: REMOVED & RELOCATED

- Septic tanks and collection wells may only be removed, relocated and reused as such where the septic tank or collection well is subject to product approval issued by the Department of Health and Families (DHF).
- The contents of the septic tank and/or collection well are to be removed either to a site acceptable to Environmental Health or pumped into the existing disposal trench.
- The sides, lid, baffle (if fitted) and square junctions of the tank should be hosed down as the waste is being removed.

- The inlets and outlets should be plugged and the tank should then be filled with clean water and disinfected to a minimum level of 5 mg/L of free residual chlorine, with a one half hour contact time. The lid should be exposed to the chlorine solution. The chlorine should be allowed to dissipate naturally and not be neutralised.
- The contents of the tank and/or well may be then emptied as stated above and the trench should be sealed. The septic tank and/or collection well may be removed if the structural integrity of the tank and/or well can be maintained.
- Environmental Health approval is to be obtained before the tank and/or well is reinstalled as a septic tank or collection well.

AWTS: DEMOLITION ON SITE

- The waste contents of the AWTS are to be removed by a method acceptable to Environmental Health, either by tanker removal to an appropriate site or pumped into a disposal trench (if one exists) and sealed. The liquid contents of the AWTS are not to be irrigated using the land application system.
- The sides, lid, baffles, components and square junctions of the AWTS should be hosed down as the waste is being removed.
- The pumps, blowers and internal components of the AWTS may be either collapsed into the AWTS or selectively removed by the owner/occupier, an AWTS manufacturer or service agent for use only as spare parts. The owner/occupier, manufacturer or service agent must remove such parts in a manner, which will not contaminate the environment or compromise the health and safety of themselves or others. Un-retrieved components must be left in the AWTS.
- The AWTS and remaining components are to be disinfected by broadcasting Builder's (hydrated) Lime over the exposed surfaces.
- Several holes should be punched into the base of the tank. The lid and those parts of the walls, baffle and square junctions above the ground should be demolished and also collapsed into the tank and the tank filled with clean soil or rubble and topped with clean soil.
- All irrigation lines and spray head, sprinklers, drippers and the like are to be flushed with potable water for 5 minutes. Should the irrigation lines be connected to the reticulated water supply the installation shall comply with the water supply authority requirements.

AWTS: USED AS A DOMESTIC GREYWATER TREATMENT SYSTEM (GTS)

The AWTS may be used as a domestic greywater treatment system provided:

- the proposal is acceptable to Environmental Health
- the AWTS is subject to product approval issued by DHF
- only greywater is connected to the AWTS, i.e. blackwater from any toilet bidette or bidet is not connected
- sewer is available for connection as a viable wastewater management alternative in sewer areas
- the land application system has been reassessed by the owner/occupier to Environmental Health's satisfaction as being suitable for the management of treated greywater
- the maintenance of the AWTS is carried out by a service contractor.

NOTE: It is not necessary to pump out or recommission the AWTS unless maintenance such as desludging is required.

AWTS: REMOVED & RELOCATED

- AWTS may only be reused where the AWTS is subject to product approval issued by DHF.
- The removal and relocation of an AWTS shall be performed by an AWTS manufacturer, installer or service agent familiar with the AWTS brand.
- The waste contents of the AWTS are to be removed by a method acceptable to Environmental Health, either by tanker removal to an approved site or pumped to a disposal trench and sealed.
- The sides, lid, baffles, components and square junctions of the AWTS should be hosed down as the waste is being removed.
- The tank should then be filled with clean water and disinfected to a minimum level of 5 mg/L of free residual chlorine, with a one half hour contact time.
- All irrigation lines and spray head, sprinklers, drippers and the like are to be flushed with potable water for 5 minutes. Should the irrigation lines be connected to the reticulated water supply the installation shall comply with the water supply authority requirements.
- The tank may then be emptied and removed. Tanks of reinforced concrete may only be removed where the structural integrity of the tank can be maintained.
- The pumps, blowers and internal components of the AWTS must be removed by an AWTS manufacturer or service agent for use only as spare parts. The manufacturer or service agent must remove such parts in a manner, which will not contaminate the environment or compromise the occupational health and safety of themselves or others.
- All mechanical and electrical items such as pumps and blowers must be renewed (not reconditioned), and covered by warranty. Valve diffusers and media may be reused and are to be cleaned and serviced.
- The maintenance of the re-installed AWTS must be carried out by service contractor.
- Approval of Environmental Health is to be obtained before the AWTS is reinstalled.

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