

STANDARD OPERATING PROCEDURE

FOR

SEPTIC TANK INSPECTION

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

Date of Preparation March 2000

Aim To provide EHOs with a standard operating procedure to monitor and enable an inspection of a septic tank system installed outside of building areas.

Associated SOPs

- Site Specific Approval and Installation Approval for AWTS

Procedures in this SOP

- Final Septic Tank Inspection
- Record of Progress Inspections

Forms/Correspondence Templates

- Record of Inspection Sheet
- Level Recording Sheet (grid for sketch of as constructed)
- Standard Letter Detailing Inspection Requirements

Reference Documents

- Code of Practice for Small On-Site Sewage and Sullage Treatment Systems and the Disposal or Reuse of Sewage Effluent
- Administration Procedures for the Approval and Installation of Small On-Site Sewage and Sullage Treatment Systems and the Disposal or Reuse of Sewage Effluent

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

Background

The *Code of Practice for Small On-Site Sewage and Sullage Treatment Systems and The Disposal or Reuse of Sewage Effluent* provides the conditions under which the Chief Health Officer, or delegates, approve a septic tank system outside a building area.

The delegates, being scheduled Environmental Health Officers, have the authority for the approval of plans and subsequent inspection of a septic tank system. For this procedure to occur, a \$400.00 fee is required to be paid to the Receiver of Territory Monies.

Following receipt of the *Application for Approval to Install a Septic Tank System Outside of Building Areas* and supporting documentation, the proposal is checked to ensure compliance with the *Code of Practice for Small On-Site Sewage and Sullage Treatment Systems and The Disposal or Reuse of Sewage Effluent*. Once the provisions are satisfied, an approval for installation is issued.

The \$400.00 fee is intended to meet the costs for both approval and inspection. There are a number of instances where this will not be the case, so to ensure economy of both finances and time, an inspection regime follows below.

Further, Self Certification of septic tank systems allows for inspection of the system following lodgement of the *Notification of Self Certification of a Proposed Installation of a Septic Tank Outside Building Areas* to the relevant Environmental Health Office. This is the formal notification to Territory Health Services of a plumber's intent to install a septic tank system. Under this procedure, the Environmental Health Officer must notify the Self Certifying Plumber of intention to inspect the septic tank system. Although it is unlikely that many septic tank systems will be inspected where self certification is to take place, it is an option when concerns are held that such a plumber may not be installing systems in accordance with the *Code of Practice for Small On-Site Sewage and Sullage Treatment Systems and The Disposal or Reuse of Sewage Effluent*.

Rationale for Septic Tank Inspection Procedure

The Code of Practice Administration Procedures specify the payment of a fee of \$400.00 for the Approval and Inspection of a septic tank system by an Environmental Health Office of Territory Health Services.

Further, should an inspected system fail to pass, a requirement exists for an additional payment of \$400.00 to be made prior to reinspection being performed.

To ensure economy both financially and with time, and further ensure an inspection is performed which records not only visual but also measurable attributes of the septic tank installation, the following inspection regime should be performed by the Environmental Health Officer.

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

The inspection is a one visit inspection.

Apparatus

- Spirit level (approximately 1 metre in length with 1:60 graduations)
- Laser level
- Tripod
- Staff with laser detector
- Tape measure (approximately 50 metres)
- Office copy of Approved Application

Septic Tank Inspection Procedure

Pipe work to septic tank

- 1:60 fall
- IOs [Inspection opening(s)]
- ORG(s) [overflow relief gully(s)]
- ORG(s) are water charged with either sullage fixture or water tap over top
- UPVC pipe work joints have been cleaned with primer (red over splash) and glued (blue)
- USVP(s) [up stream vent pipe] in correct position(s)

Septic Tank

- Level
- Inlet and outlet position
- Water filled
- Sealed
- IOs before and after tank
- IOs on tank with risers to surface level and protected
- Cover(s) removed with saddle and riser(s) installed to above ground surface
- Sketch as constructed with septic tank location ie. distances from site features

Effluent disposal field

- Fall of pipe work from septic tank to distribution box (1:400 minimum).
- Disposal field built to contour (take level readings around surface of disposal field - include ends & middle and top & bottom of effluent disposal trenches).
- Level in bottom of trenches (both ends and some readings in middle).
- Levels of slotted pipe (if appropriate).
- IOs on end of trenches with risers to surface level and protected.
- Part of aggregate in disposal field and remainder on site to complete back filling operations. Check correct size and minimal fines.
- Measure length and width of trenches (including drain material eg. slotted pipe, plastic arch tunnel). Sketch as constructed with trench locations ie. distances from other site features.

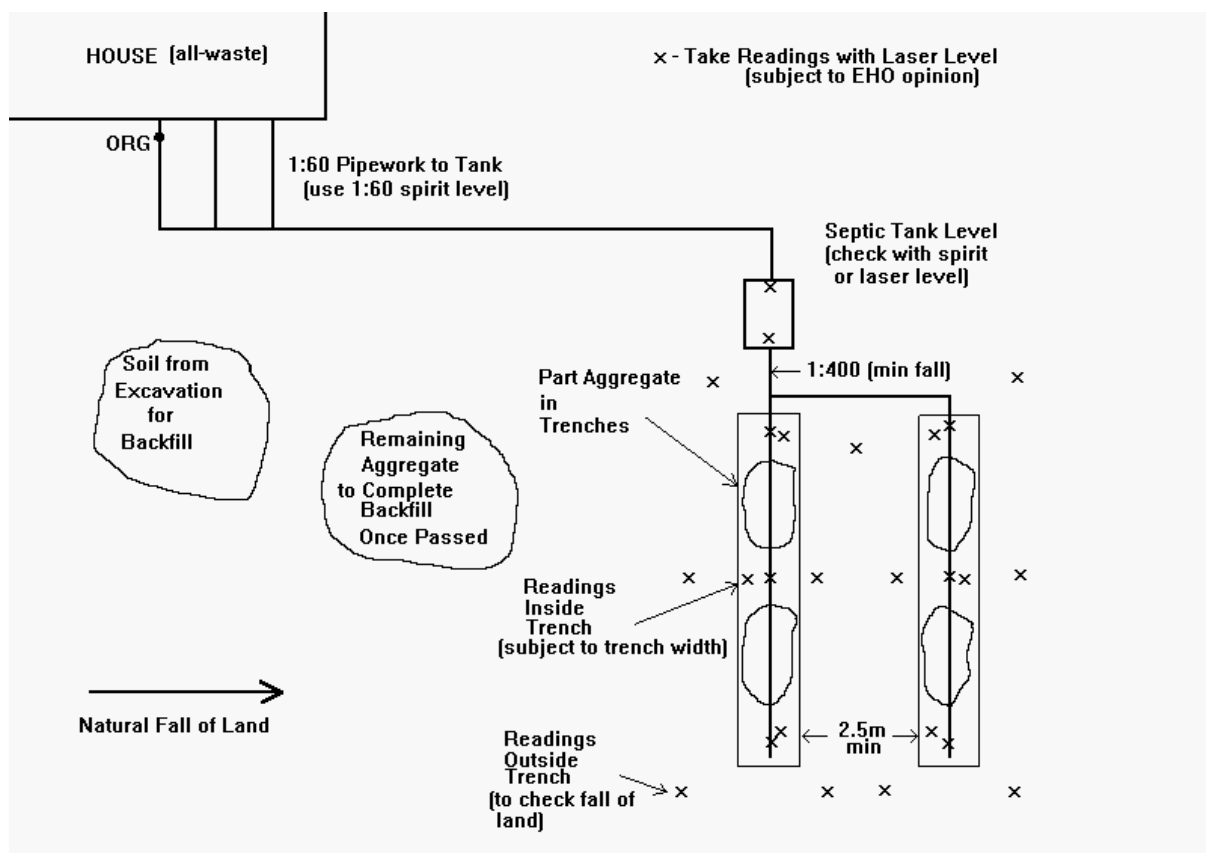
STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

Notification of Inspection Result

Following completion of the inspection, advise the plumber/contractor that works have passed/failed verbally if available. Confirm result by facsimile/letter/email.

If passed, inform plumber/contractor that backfilling pipe work, remaining aggregate and quality top soil on effluent disposal area is permitted.

If failed, advise of faults in writing and arrange for further inspection. Advise of additional inspection fee if appropriate.



This example shows slotted agricultural pipe in effluent disposal trenches. Please note that level readings do not have to be taken on plastic arch tunnel.

This example only shows an all-waste system however the same principles apply to a split system for Aboriginal Communities.

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

A large grid of graph paper, consisting of 20 columns and 40 rows of small squares. The grid is intended for recording data during a septic tank inspection.

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

LOCATION

		PROGRESS	COMPLETED
SITE INSPECTION			
INTERNAL	Under floor wastes		
	Fixtures		
EXTERNAL			
Sewer drain	IOs		
Vents	Head		
	Branch		
Overflow Relief Gully			
Septic Tank	Precast – Concrete		
	Fibreglass		
	Plastic		
	Insitu – Concrete		
	Insitu - Block		
	Inlet IO to surface level		
	IO protection		
	IOs before & after tank		
	Saddle / Riser		
	'Gatic' Cover		
	Cover Slab		
	Capacity (Litres)		
Sullage Tank	Precast – Concrete		
	Fibreglass		
	Plastic		
	Insitu – Concrete		
	Insitu - Block		
	Inlet IO to surface level		
	IO protection		
	IOs before & after tank		
	Saddle / Riser		
	'Gatic' Cover		
	Cover Slab		
	Capacity (Litres)		
Pumping Sump			
Motor Operated Pump	Alarm		
Distribution Box			
Effluent Disposal	Sewage – length (m)		
	Sullage – length (m)		
Protection of System			
Stormwater Diversion			
Geotechnical Tests	Soil Percolation		
Follow up comments			

Progress – whether seen, not seen or buried only required

Complete – initials and date

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

ENVIRONMENTAL HEALTH
Phone: *Insert Telephone Number*

Insert File No.

Insert Date

Insert Name
Insert Company Name
Insert Address
Insert Town NT Post Code

Dear *Insert Name*

RE: INSPECTION OF SEPTIC TANK INSTALLATION
INSERT ADDRESS

I refer to the Application for Approval to Install a Septic Tank System Outside of Building Areas which was lodged on *Insert Date*. This was processed and approved on *Insert Date*. A copy of the approved application is enclosed.

In accordance with the Administration Procedures for the Approval And Installation of Small On-Site Sewage And Sullage Treatment Systems and The Disposal Or Reuse Of Sewage Effluent, you are required to give a minimum of seven (7) days notice of request for inspection and testing of the installation works by an Environmental Health Officer.

In order that the installation can be inspected and tested, the following is required at the installation;

- all external plumbing from the building to the septic tank to be left exposed.
- top of septic tank including inlet and outlet to be left exposed.
- saddle, riser(s) and lid to be in position on septic tank.
- IO risers (to above proposed finished ground level) to be in position on septic tank.
- septic tank to be filled with clean water.
- pipe work from septic tank to distribution point to be left exposed.
- effluent disposal trenches to be left exposed at both ends and the middle.
- aggregate to be in position in remaining sections of effluent disposal trenches (with remainder for backfilling to be located on site of the installation).
- soil for backfilling of trenches and effluent disposal field to be located on site.

Following inspection and testing of the installation, you will be advised as to whether the system passed or failed. If passed, the installation can be backfilled with the remaining aggregate into the effluent disposal area(s) and topsoil into exposed installation work and top of effluent disposal area(s).

STANDARD OPERATING PROCEDURE - SEPTIC TANK INSPECTION

If the installation works fail inspection, another inspection fee of \$400.00 is required for reinspection. A reinspection date will be required to be negotiated with the Environmental Health Officer.

If you have any further inquiries, please contact me on *Insert Telephone Number*.

Yours sincerely,

Insert Name

Environmental Health Officer

Insert Office Name