

GUIDELINES

DIVISION OF SANITATION FACILITIES CONSTRUCTION

Office of Environmental Health and Engineering
Navajo Area Indian Health Service
Window Rock, Arizona

CHAPTER 5--Service Policies

Section 6: Procedures for Handling Failed On-Site Waste Water Disposal Systems

Guideline No. 5.6 (99-12)
October 1, 1999

Supersedes: G 5.6 (93-15)

Distribution: Standard List

GENERAL

This guideline is written to document the SFC policy on investigation and reporting of failed on-site wastewater disposal systems (commonly referred to as septic systems).

The SFC has been installing septic systems since the early 1960s under Public Law 86-121. Most of the installed systems have been composed of a septic tank and drainfield. It is estimated that SFC has constructed over 12,000 such systems on the Navajo Reservation to date. The exact life expectancy of such systems is unknown, but it is projected to be 20-30 years. Many of the systems installed are now approaching the end of their life expectancy or have exceeded it.

Before systems are constructed by SFC, homeowners must sign an Individual Agreement form (Attachment A) indicating that they agree to operate and maintain the system. This includes inspecting the septic tank for scum and sludge levels and having the sludge and scum pumped out on a periodic basis (normally every 3-5 years). Homeowners may also attend training in septic tank/drainfield maintenance sponsored by SFC.

There are various reasons systems can fail. Most of the reasons are listed below:

1. Poor design.
2. Poor construction.
3. Inferior materials.
4. Lack of maintenance (pumping septic tank).
5. Overloaded system due to higher flows than initial design considered: More people living in the home; addition of a washing machine; doing laundry for more than home occupants.
6. Farm irrigation.
7. Collapsed septic tank due to abuse (driving over the tank).
8. Drainfield beyond useful life.
9. Compacted soil due to driving vehicles over drainfield.

The SFC can control failures due to items 1, 2, and 3. The homeowner has control over the remainder. Items 4 and 5 are probably the cause for most failures.

What can we do about failures? SFC does not have a program to replace older failed septic systems. If a system has been under beneficial use for less than one year and was installed by the SFC, it can be replaced under the standard SFC warranty if SFC determines that it is at fault.

Can SFC provide other forms of assistance? SFC engineers are available (depending on workload) to provide technical assistance to chapters and individual homeowners on how to repair or replace failed systems. Typically, the SFC can inspect the system to determine the cause of failure and recommend what type of repair or replacement is needed. SFC can test the soil for suitability and size of system needed. The SFC can determine the type and amount of materials needed and where to get them. If the homeowner does the work himself, SFC can provide instruction on how to install the replacement system. The SFC can also recommend local contractors that can do the work.

It is important that any technical assistance or field contact be documented in the individual homeowner folders and memos to the record. Each field office shall also maintain a file on failed septic systems.

Occasionally field offices will get referrals from Tribal Community Health Representatives and Public Health Nurses on septic system failures. Field investigation should be as stated above with a formal follow-up reply including any recommendations.

SANITATION DEFICIENCY SYSTEM (SDS)

Projects that provide for the remediation of failed wastewater disposal systems are included in SDS. When scored correctly projects such as these typically score from 45 to 55 points in the priority system, which puts them years away from funding.

If NTUA (or another operating utility) has discontinued water service to a home because the home has a failed on-site waste water disposal system, then score the house for the health field as you would any home without water. This might get the score into a same-year funding range.

APPROVED BY:



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Division of Sanitation Facilities Construction

DEPARTMENT OF HEALTH & HUMAN SERVICES
U. S. PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE

PROJECT NO. _____

INDIVIDUAL AGREEMENT
Between Head of Household & U. S. Public Health Service
under Public Law 86-121

I hereby agree to accept upon completion of installation the following described facilities to be installed on the premise located herein and on land occupied by me. I also agree to operate, maintain and keep these facilities in good repair at my own expense.

Indian Health Service will provide a 12-month warranty period for the facilities checked below commencing from the date of installation and acceptance by me; unless negligence, lack of preventive maintenance, or damage due to acts of nature are the cause of failure.

I agree to pay utility bills resulting from my use of these facilities.

- Water Service Line w/appurtenances from meter box to the house (Meter and meter box belongs to NTUA).
- Cistern W/solar panel, battery, and pump
- Cistern W/electric pump and pressure tank
- Cistern, gravity feed
- Community Sewer Service Line
- Septic Tank and Drainfield
- Seepage Pit
- Short Plumbing Wall
- Long Plumbing Wall
- Rough-in Plumbing
- Lavatory
- Toilet
- Kitchen Sink
- Water Heater
- Bath Tub
- Garbage Cans W/stands
- Other (specify): _____

Premise Location: _____

I agree to have the above facilities installed in my home.

(Date)

(Signature of Head of Household)

I hereby accept the above facilities with a 1-year warranty beginning _____.

(Date)

(Signature of Head of Household)

I hereby certify that the above described facilities have been installed.

(Date)

(Signature of Head of Household)

DISTRIBUTION: White copy to Project Engineer
Pink copy to Householder