CHAPTER 12
ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEM REGULATIONS FOR RESIDENTIAL SEPTIC TANK AND LEACHING SYSTEM AND TEMPORARY TOILET FACILITIES

2023 NOTE: These regulations are published in a Guam Environmental Protection Agency document on file at the Compiler's Office. According to the GEPA publication, the regulations revised and renamed the Individual Wastewater Regulations, were adopted by the GEPA Board on July 2, 1987, and approved by the Attorney General on Sept. 1, 1987. In the 1997 printed GAR, these regulations are entitled "Individual Wastewater Disposal System Regulations" and include the following annotation:

> **NOTE:** Rule-making authority cited by Guam Environmental Protection Agency, 10 GCA § 45106.
>
> These regulations were filed with Legislative Secretary on September 11, 1987.

There are differences between the 1997 GAR codification and the GEPA publication; as published in the 1997 GAR, the regulations were renumbered, certain provisions had different language, and drawings and/or figures were omitted.

This 2023 GAR online publication reflects the language from the GEPA publication, renumbered pursuant to 1 GCA § 1606. Differences in language between the GEPA document and the 1997 GAR are noted in a Compiler's annotation. Annotations in the original GEPA publication are identified as "GEPA NOTE." References to the Public Utilities Agency of Guam replaced with Guam Waterworks Authority pursuant to P.L. 23-110:3 (July 31, 1996).

§ 12101. Authority.

Section 45106 of Chapter 45, Title 10 of the GCA authorizes the Guam Environmental Protection Agency to adopt such regulations as may be necessary to implement Chapter 48, Toilet Facilities and Sewage Disposal, of Title 10.

2023 NOTE: As published in the printed 1997 GAR, this provision read follows:

> (a) Title 10 Chapter 45 §45106 authorizes the Guam Environmental Protection Agency to adopt such regulations as may be necessary to implement Chapter 48, Toilet Facilities and Sewage Disposal, of Title 10.

§ 12102. Purpose.

The purpose of these regulations is:

(a) Protect the health of the septic tank user and his neighbors.

(b) To establish minimum standards that will ensure that wastes discharged:

(1) Will not pollute or contaminate the waters of any bathing beach, shellfish breeding grounds, or stream or groundwater source which could be used for public or domestic water supply purposes or for recreational purposes;

(2) Will not pose a health hazard by being accessible to children.

(3) Will not give rise to a nuisance due to odor or unsightly appearance;

(4) Will not violate any other laws or regulations governing water pollution or sewage disposal.

§ 12103. Definitions.

For the purposes of this Chapter, the definitions in 10 GCA Chapter 48 are adopted in addition to the following:

(a) *Abutting Property* means that property, which lies next to any road, street or easement in which a public sewer is located. The boundary of the private property abutting the sewer need not physically touch the sewer easement so long as that piece of land separating the sewer easement from the abutting property consists of a public right of way, easement, road, or street not owned or controlled by another private owner, so that the abutting property owner would be required to obtain a private easement in order to connect this property with that of the sewer.

(b) *Accessory Dwelling Unit* (ADU) means a secondary studio or bedroom dwelling unit that includes a separate entrance, kitchen, and bathroom facilities, detached from or attached to the primary single-family home on the zoning lot.

(c) *Adjacent Homeowners* means homeowners where residences are adjacent to and abut a road, street or other way or easement on which a sewer is installed.

(d) *Administrator* means the Administrator of Guam Environmental Protection Agency or his duly authorized representative.

(e) *Advanced Nitrogen-reducing Onsite Disposal System (ANODS)* means an onsite wastewater treatment and disposal system that reduces total nitrogen in effluent by at least fifty percent (50%) and that is certified by Guam Environmental Protection Agency in accordance with this Chapter.

(f) Agency means Guam Environmental Protection Agency (GEPA).

(g) *Conventional soil absorption system* means a system employing gravity flow from the septic or other treatment tank and applying effluent to the soil through the use of a seepage trench, bed, or pit.

(h) *Duplex (also "Dwelling, Two-Family)* means a detached building containing two dwelling units.

(i) *Holding Tank* means an approved water tight receptacle for collecting and holding sewage.

(j) *House Sewer or Building Drain* means that part of the lowest piping of a drainage system which receives the discharge from all waste lines and other drainage pipes inside the walls of the building except those discharging grease and oil, and conveys it to the building sewer pipe beginning 5 feet

outside the building walls. Rain water from roof drains or any source shall not be diverted to the said system.

(k) *Public Sewer* means a common sewage collection system serving more than one lot, directly controlled by public authority.

(l) *Single Family Residence (also "Single Family Home" or "Dwelling, One-Family")* means a building designed exclusively for occupancy for one family and containing only one dwelling unit.

(m) *Type 2 toilet facility* means a toilet flushed with water and connected to ~~a septic tank and leaching system~~ a private sewage disposal system, not including cesspools.

(n) *Type 3 toilet facility* means privy type, including pit privy, trench latrine and bored-hole latrine.

(o) *Type 4 toilet facility* means toilets flushed with water and connected to an Advanced Nitrogen-reducing Onsite Disposal System

(p) *Water of the Territory* means all shore waters surrounding Guam, streams, lakes, springs, irrigation system, marshes, water courses, waterways, drainage systems, and other bodies of water, surface and underground, natural or artificial, publicly or privately owned.

2023 NOTE: *As published in the printed 1997 GAR, there were differences in language of subsections (c), (e), and (f), which read as follows: means*

(c) Septic Tank means a water tight receptacle which receives the discharge of sewage and is designed and constructed so as to retain solids, digest organic matter through a period of detention, and allow the treated liquids to discharge into a subsurface leaching system.

(e) Sewage or Wastewater means untreated or insufficiently treated human excreta, food waste disposed of through sewers; wash water; liquid wastes from residences, commercial buildings, agricultural operations, and industrial establishments or other places of assembly, and such diluting water as may have entered the waste disposal system.

(f) House Sewer or Building Drain means that part of the lowest piping of a drainage system which receives the discharge all waste lines and other drainage pipes inside the walls of the building except those discharging grease and oil, and conveys it to the building sewer pipe beginning 5 feet outside the building walls. Rain water from roof drains or any source shall not be diverted to the said system.

§ 12104. Non-Availability of Public Sewer.

(a) When public sewer intended to serve any lot or premises is not available in any thoroughfare or right of way abutting such lot or premises, drainage piping from any building or works shall be connected to an approved private sewage disposal system. Availability of public sewer shall be determined in accordance with 22 GAR Chapter 25, Connection to Public Sewer Regulations.

~~(b) The public sewer may be considered as not being available to a single family residence or duplex or any residential building, when such public sewer is located more than two hundred (200) feet away from any proposed single family residential unit or duplex, or any existing residential building on any lot or premises which abuts and is served by such public sewer.~~

~~The Administrator may grant exemption for a single family residential unit or duplex where a public sewer is less than 200 feet away from the building and such residential building cannot be connected to the public sewer by gravity due to obstructions. Exception may only be granted by the Administration, if the Administrator is convinced that after written findings an exemption will not jeopardize the general public health and welfare.~~

~~(c) Vertical Alignments — Where public sewer is available to a particular building and sewer location is, (1) more than twenty (20) feet above the lowest floor level of the single family residence or a duplex; or (2) more than fifty (50) feet above the lowest floor level of any other structures, public sewer may be considered as not being available.~~

(b) ~~Exemptions, where the vertical distances between lowest floor level and the sewer is less than 20 feet, may be granted by the Administrator for a single family residential unit or duplex when by written findings it is determined that the public health and welfare will not be jeopardize.~~Where water is available from the Guam Waterworks Authority, but a public sewer is not available, toilet facilities shall be type 2 or type 4.

2023 NOTE: *As published in the printed 1997 GAR, there was a difference in language of subsection (b), second paragraph, which read as follows:*

> *The Administrator may grant exemption for a single-family residential unit or duplex where a public sewer is less than 200 feet away from the building and such residential building cannot be connected to the public sewer or gravity due to obstructions. Exception may only be granted by the Administration, if the Administrator is convinced that after written findings an exemption will not jeopardized the general public health and welfare.*

§ 12105. Private Sewage Disposal System (General).

(a) Where permitted by § 12104, a building may be connected to a private sewage disposal system which complies with other provisions set forth in these regulations. The type of system shall be determined on the basis of location, property area, soil porosity, and ground water level and shall be designed to receive all sanitary sewage from the property. ~~The system, except as otherwise provided, shall consist of a septic tank with effluent discharge into a sub-surface disposal field.~~

(b) Where conditions are such that the above system cannot be expected to function satisfactorily for commercial, agricultural and industrial plumbing systems; for installations where appreciable amounts of industrial or indigestible waste are produced; for hotels, hospitals, office buildings, schools; for occupancies producing abnormal quantities of sewage or liquid waste; the method of sewage treatment and disposal shall be first approved by the Administrator. Special sewage disposal systems for minor, limited or temporary uses shall be first approved by the Administrator.

(c) Disposal systems shall be designed to utilize the absorptive portions of the soil formation. Where the ground water level extends to within ~~twelve (12)~~ three (3) feet or less of the ~~ground surface~~ bottom of the soil absorption system or where the upper soil depth is insufficient and the underlying stratum is rock or impervious soil, a ~~septic tank and~~ conventional soil absorption system may not be installed. Under such conditions, it may be possible to utilize a mound system, if site conditions allow and all requirements under § 12113 can be met.

(d) All lots served by a~~n on site disposal system~~ private sewage disposal system which utilizes a soil absorption system shall contain sufficient reserve area which would permit at least 100% replacement of the proposed ~~leach field~~ soil absorption system. No division of the lot or erection of structures on the lot shall be made if such division or structure impairs the functional usefulness of the designated 100% expansion area.

(e) No property shall be improved in excess of its capacity to properly absorb sewage effluent in the quantities and by the means provided in these regulations.

(f) When there is insufficient lot area or improper soil conditions for adequate sewage disposal from a building or proposed use of the land as determined by the Administrator, no building permit shall be issued and no private sewage disposal shall be permitted. Where space or soil conditions are critical, no building permit shall be issued until engineering data and test reports satisfactory to the Administrator have been submitted and

approved.

(g) Where public sewers may be installed at a future date, provisions ~~should~~ shall be made in the household plumbing system for connection to such sewer upon notification by the Administrator ~~within 5 years period after it is available~~ pursuant to 22 GAR Chapter 25.

(h) New ~~septic tanks, leaching fields, out houses or other on-site~~ private sewage disposal systems shall not be permitted within flood hazard areas. All sewage disposal lines shall be connected to ~~government sewage~~ public sewer at the developer's expense. Sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters in accordance with 18 GAR Chapter 3 ~~(Section IV. E. Standards for flood Hazard Area Management, Floor Hazard and Wetland Area Rules and Regulations.~~ Variances to such standard or procedure maybe granted through appeal to the Guam Land Use ~~Territorial Planning~~ Commission which may grant such variances only upon written findings that applicant satisfied all the criteria outlined granting variances under 21 GCA § 6161~~6-7~~).

(i) Nothing contained in these regulations shall be construed to prevent the Administrator from requiring compliance with higher requirements than those contained herein where such higher requirements are essential to maintain a safe and sanitary condition.

(j) No wastewater disposal system installations, constructions, repairs or additions shall be made by the owner of the property without written permit from the Agency.

(k) Any person whose application for a permit under these regulations has been denied ~~shall be notified in writing as to the reason for denial and such person may within 15 days after date of official notification, shall file a written request for a hearing before the Agency. Such hearing shall be held by the Agency within 30 days after receipt of the request and upon reasonable notice to the applicant. The Board of Directors of the Agency shall affirm, modify, or revoke the denial, or issue the permit on the basis of the evidence presented at the hearing~~ may appeal such denial in accordance with the process and timeframes specified in 10 GCA Chapter 48.

(l) The design criteria presented in these regulations can only be applied to systems utilized by residential units up to and including a ~~four-plex~~ two-unit dwelling (duplex). Systems which must serve larger residential complexes, commercial, or industrial facilities shall be based on the current edition of the

International Private Sewage Disposal Code (IPSDC) as adopted under the Building Law at 21 GCA § 67101.4, or other design guidance approved by the Administrator and subject to the requirements of the Guam Water Quality Standards (22 GAR Chapter 5). ~~must be based on design criteria specific to the facility~~. The standard guidance presented within these regulations is not considered adequate for such facilities.

(m) Approval of Administrator required. No toilet or sewage facilities or single-family residences subdivisions, apartments, motels, hotels or other multi-housing facilities, commercial buildings, institutions, and industrial facilities, may be constructed without the approval of the Administrator, or put into operation without his inspection and approval.

(n) Within the Groundwater Protection Zone (GPZ), the following requirements apply, consistent with the policies established under the Water Quality Standards (22 GAR § 5101 (c)):

(1) Type 2 or Type 4 toilet facilities which utilize a soil absorption system for effluent disposal may only be permitted for single family dwellings, accessory dwelling units (ADUs), or duplexes

(2) No private sewage disposal system shall be permitted unless:

(A) A lot area of at least 19,200 square feet is provided per dwelling unit*; or

(B) The lot is subject to the exemptions in 21 GCA §62104 ("parental" and "decedent" lots), no less than 9600 square feet, and the dwelling is connected to a Type 4 toilet facility which is operated under a valid operating permit issued pursuant to this chapter.

*Note: Relative to Sec 12105(n)(1)(A), the Administrator may allow small deviations from this minimum lot area requirement, up to ten (10) percent, to account for takings of easements and rights of way or other purposes. In such cases, the Administrator must state the reasons for allowing the deviation in writing in the permit approval letter.

2023 NOTE: As published in the printed 1997 GAR, there were differences in language of subsections (h) and (i), which read as follows:

(h) New septic tanks, leaching fields, out houses or other on-site sewage disposal systems shall not be permitted within flood hazard areas. All sewage disposal lines shall be connected to government

sewage at the developer's expense. Sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters Variances to such standard or procedure maybe granted through appeal to the Territorial Planning Commission which may grant such variances only upon written findings that applicant satisfied all the criteria outlined granting variances satisfied all the criteria outlined granting variances under 21 GCA § 61617.

(i) Nothing contained in these regulations shall be construed to prevent the Administrator from requiring compliance with higher requirements are essential to maintain a safe and sanitary condition.

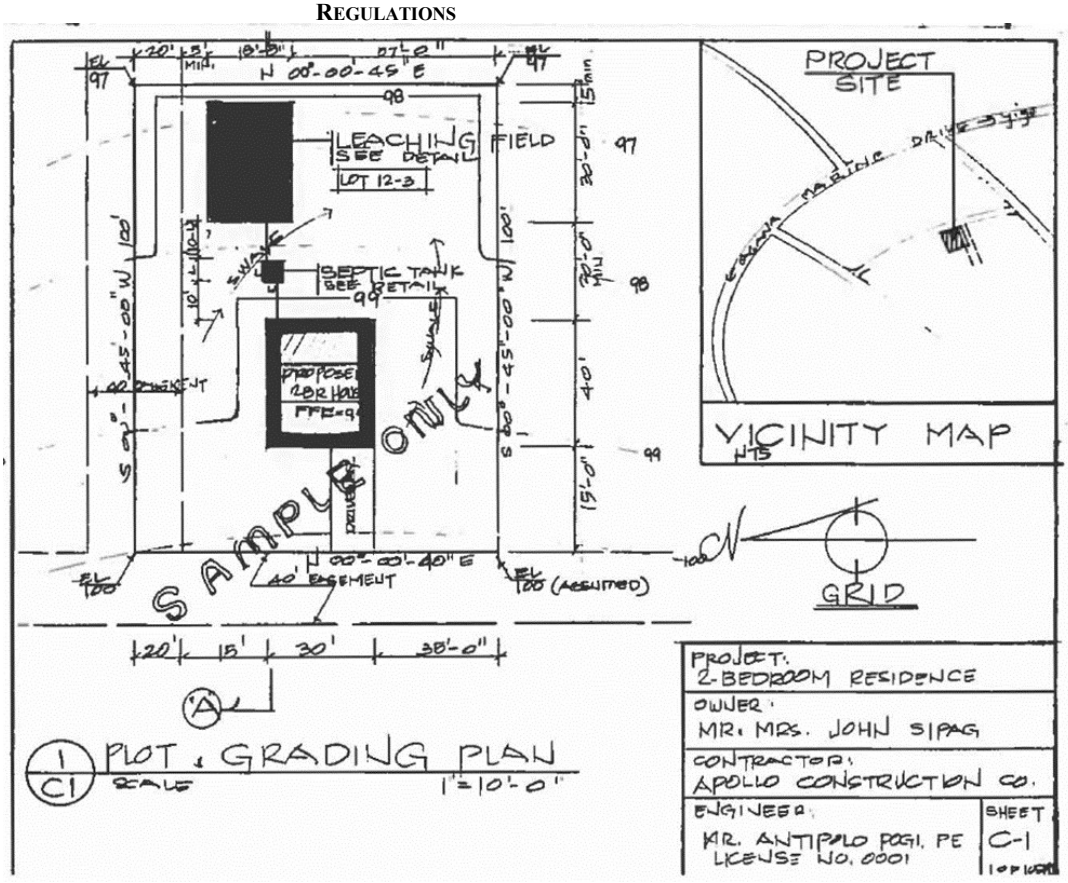
In subsection (a), the reference to "Section IV of these regulations" has been replaced with § 12104 to reflect the renumbering, pursuant to ~~to~~ the authority of 1 GCA § 1606.

§ 12106. Permit Application ~~Issuance Procedures and Requirements~~ for Wastewater Disposal Systems.

(a) Before specific plans and specifications for ~~individual~~ private wastewater disposal system permit application are reviewed for compliance with Guam Environmental Protection Agency (GEPA) regulations, such plans and specifications shall contain the following as minimum:

(1) Vicinity Map - plans must include vicinity map to locate property showing adjacent streets with names and other land marks that can easily locate the property where the proposed improvement is to be established.

(2) Plot and Grading Plan (DWG-C-1) - plans must include a plot plan, drawn to scale and completely dimensioned, showing direction and approximate slope of the ground surface, and must contain the following:



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(A) Delineation of property boundaries, lot number and zone designation;

(B) Delineation of public rights of way, easements and access roads, if applicable;

(C) Indication of location of all present or proposed or existing retaining walls, drainage channels, water supply lines or walls, paved areas and structures on the plot with relation to lot lines and structures.

(D) Location of proposed or existing sewage facilities in relation to property boundaries, public rights of way, easements and access roads, existing structures and utilities, and the proposed building.

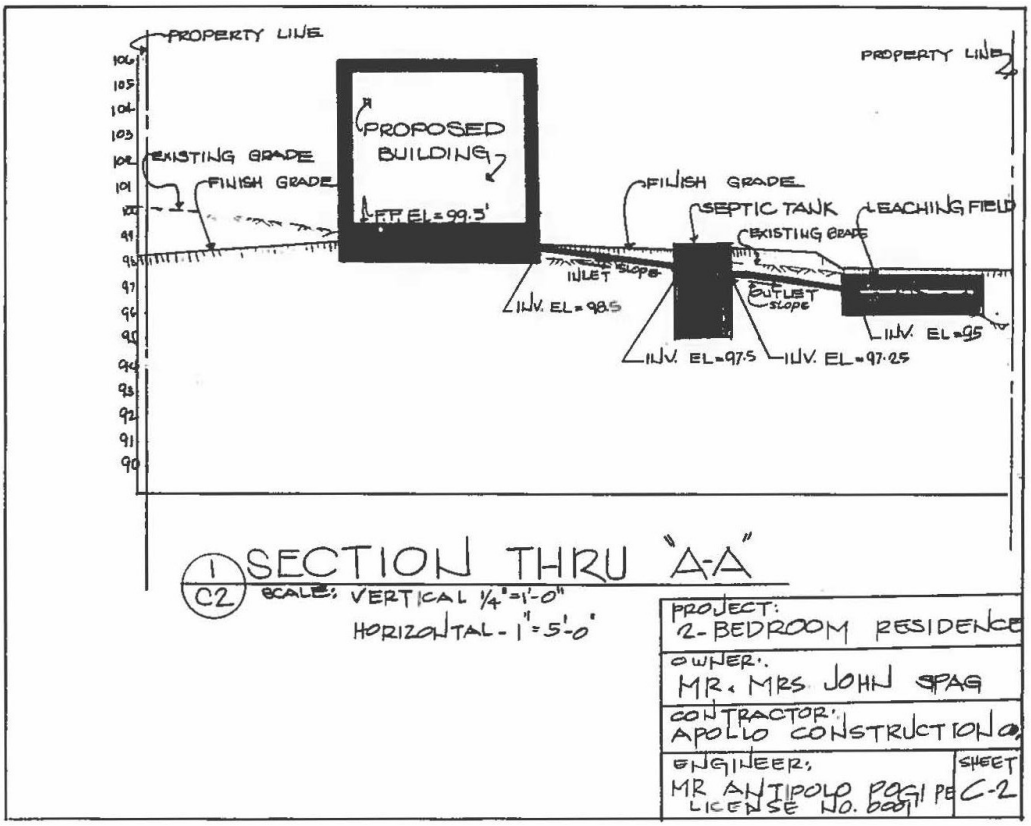
(E) A description of the complete installation including quality, kind and grade of materials, equipment, construction, workmanship and methods of assembly and installation.

(F) A log of soil formation and ground water

levels as determined by the test holes dug, in accordance with the requirements of the Administrator, at the location of the proposed ~~leaching~~ soil absorption system.

(G) Topography of the area, showing contour lines and floor elevation of the existing or proposed building.

(H) Profile of existing ground and elevations of flowline along sewerline as per cross-section plan drawing (DWG-C-2).



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(3) Regardless of the type of disposal system applied for, the permit application should bear the signature of the Guam Waterworks Authority for water and sewer availability verification, and approval for sewer connection if sewers are available and location of connection point. The Department of Land Management must process the plans for verification of property boundary, confirmation of ownership, zoning and itemization Guam Planning

Commission/Guam Seashore Planning Commission of conditions prior to GEPA review and their signature must be included on the Building Permit Application Form.

(A) When a property is within the wetland zone, review and clearance and approval from Land Management, Bureau of Planning, ~~ACOE~~ U.S. Army Corps of Engineers, and Department of Agriculture is required prior to GEPA review and their signature or other written proof of approval must be included with the Building Permit application.

(4) Design calculations ~~of~~ supporting the proposed wastewater disposal system ~~is~~ are required and the design must be ~~done~~ performed under the direct supervision and bear the stamp and signature of a ~~licensed specialty contractor or~~ registered professional engineer.

(5) ~~A~~ The log of soil formations, water table depth, and percolation test results ~~and water table tests~~ should be performed under the supervision of ~~by~~ a registered professional engineer and such test results should bear ~~his~~ the engineer's stamp and signature. This requirement may be waived by the ~~Agency~~ Administrator, if the ~~Agency~~ Administrator has sufficient information to determine the suitability of the soil conditions.

(6) Complete ~~septic tank and leaching field or aeration tank and leaching field~~ design and construction details must be included in the building plans and specifications for the proposed private sewage disposal system.

(b) A building permit application form, completely filled out with name(s) and address of applicant, job location, lot, block and tract numbers, and area of lot in square feet or square meters.

(c) Three (3) complete sets of building plans, one for the Environmental Protection Agency (EPA) and the other two (2) for distribution to other agencies, or one set in a readily accessible electronic format (e.g., pdf files) if acceptable to the Administrator.

(d) ~~Septic Tank~~ Permit Validity - Any ~~septic tank~~ permit for the construction of a private wastewater disposal system shall ~~be void if the work authorized by said permit is not commenced within three (3) months after its issuance; or is suspended or abandoned for a period of three (3) months at any time the work has commenced; provided that for just cause stated in writing to the Administrator, the Administrator may allow up to a maximum of three (3) months extension. All such~~

~~extensions shall be in writing and noted on the septic tank permit and in the individual wastewater records of the Section of Individual Wastewater Program~~ become null and void under the following conditions:

(1) If permitted work is not started within one hundred eighty (l80) calendar days after the date of issuance of the permit; or

(2) If work is suspended or abandoned any time after the work is commenced for a minimum period of sixty (60) days; or

(3) If work is continued without interruption for one (1) year, beginning with the date of issuance of the Building Permit.

Once a permit has expired, the owner/applicant shall pay the required fees and obtain a new permit pursuant to these regulations, before resuming or beginning new work.

(e) No building permit or certificate of occupancy under the Building Law of Guam shall be issued without prior compliance with the requirements of the above section.

2023 NOTE: *As published in the printed 1997 GAR, there were differences in language of subitems (a)(2)(C) and (G), and subsection (d) as follows:*

(C) Indication of location of all present or proposed or existing retaining walls, drainage channels, water supply lines or walls, drainage channels, water supply lines or walls, paved areas and structures on the plot with relation to lot lines and structures.

(G) Topography of the area, showing contour lines and floor elevation of the existing or proposed building.

(d) Septic Tank Permit Validity - Any septic tank permit shall be void if the work authorized by said permit is not commended with three (3) months after its issuance; or is suspended or abandoned for a period of three (3) months at any time the work has commended; provided that for just cause stated in writing to the Administrator, the Administrator may allow up to a maximum of three (3) months extension. All such extensions shall be in writing and noted on the septic tank permit and in the individual wastewater records of the Section of Individual Wastewater Program.

Reference to the Territorial Planning Commission/Territorial Seashore Planning Commission replaced with Guam Planning Commission/Guam Seashore Planning Commission pursuant to 1 GCA § 420.

§ 12107. Capacity of Septic Tanks.

(a) The net volume or effective capacity below the flow line of a septic tank, for flows up to 500 gpd, should be at least 750 gallons. For flows between 500 and 1500 gpd, the capacity of the

tank should equal to at least 1-1/2 days sewage flow. The liquid capacity and sizes of septic tank as determined by the number of bedrooms or duplex units in any dwelling occupancies shall be as established in Table 1 - "Guidelines for Construction of Septic Tank (Liquid Capacity)".

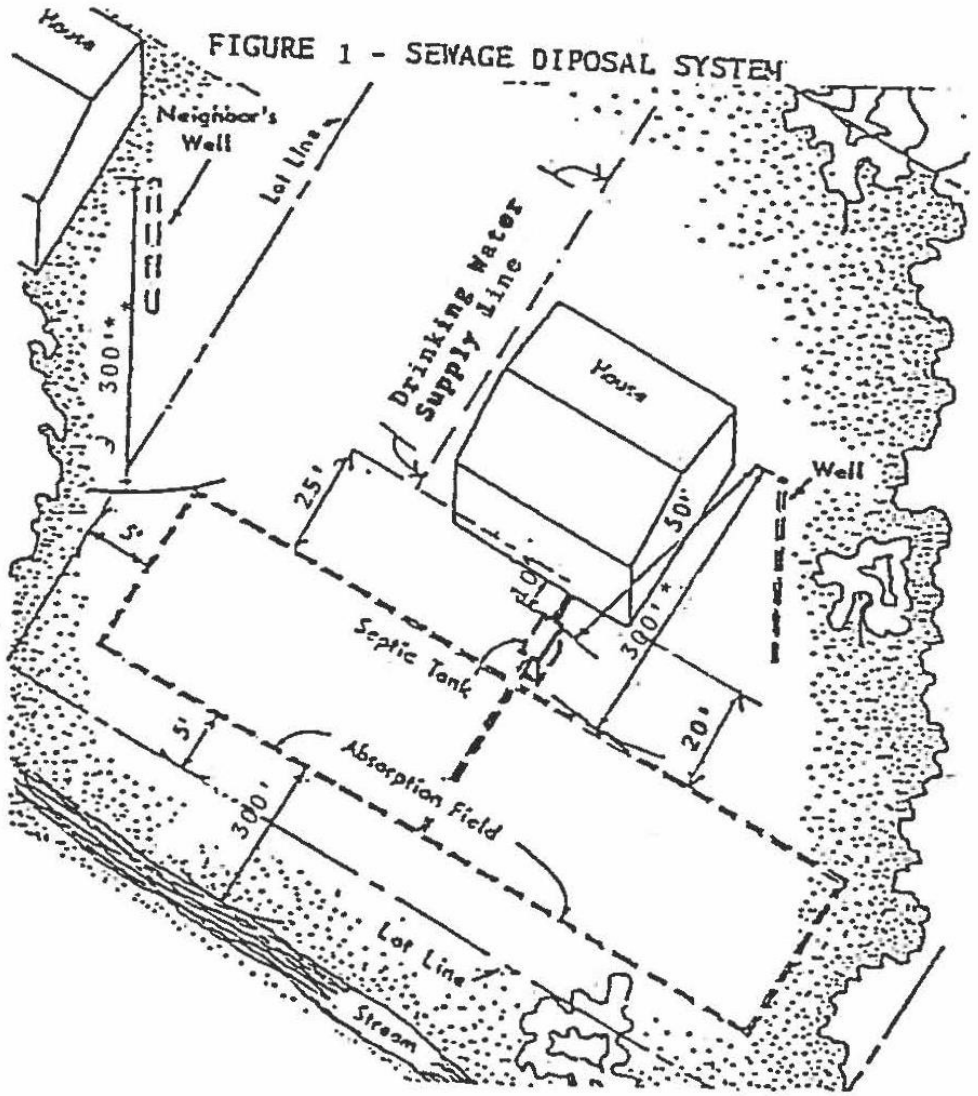
TABLE I
GUIDELINES FOR CONSTRUCTION OF SEPTIC TANK
(LIQUID CAPACITY)

Number of Bedrooms	Recommended Sewage Flow* (Gallons) GPD	Recommended Minimum Tank Capacity (Gallons)	Recommended Minimum Inside Tank Dimension L. W. D.
2	480	750	6' x 4' x 6'
3	720	1,080	7' -6" x 4' x 6'
4	960	1,440	7' x 6' x 6'
5	1,200	1,800	7' x 7' x 6'
6	1,400	2,160	8.5' x 7' x 6'

Source: GEPA, Rural Islandwide Facilities Plan, Table 5-2, Page 5-17. Manual of Septic Tank Practice - U.S. Department of Health; Education and Welfare. Public Health Service Publication #526.

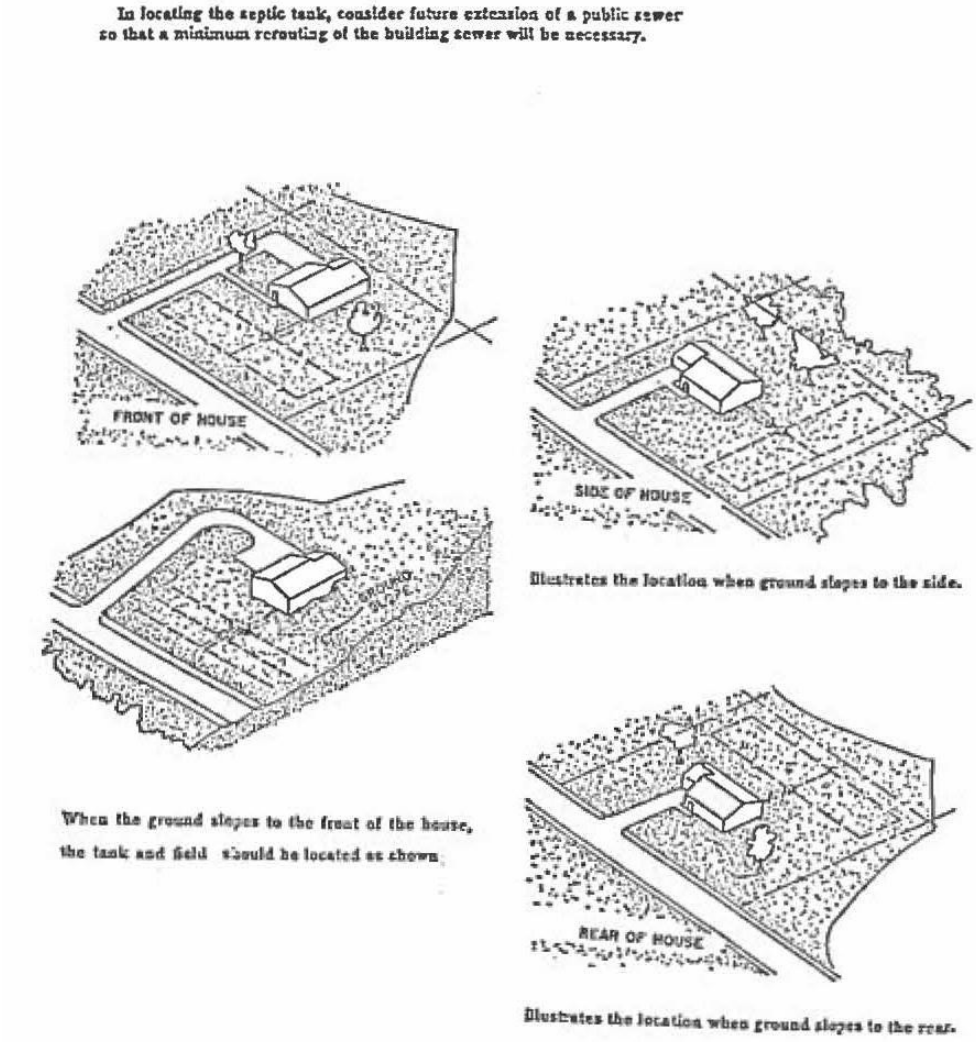
§ 12108. Location and Installation of Private Sewage Disposal System.

(a) No part of the system shall be located so that is nearer to any water supply than outlined in Figure 1 and Table II, or so that surface drainage from its location may reach any domestic water supply. The distances given in Figure 1 and Table I are the minimum distances to any water of the territory, property lines, dwelling, school, public building, or a building used for commercial, or industrial purposes or as a place of assembly.



(*) See Notes on Table II

(b) Suggested location of tank and ~~disposal field~~ soil absorption system on varying ground slopes (Figure 2).



(c) Location for Type 2 toilet facilities, other than holding tanks, shall be such as to provide not less than the stated minimum distances in Table II - A. Location for Type 4 toilet facilities and Holding Tanks shall be not less than the stated minimum distances in Table II – B.

TABLE II – A
MINIMUM SAFE HORIZONTAL DISTANCES IN FEET
FOR CONVENTIONAL SOIL ABSORPTION SYSTEMS AND PRIVIES

From	To			
	Privy	Septic Tank	Soil Absorption ~~Bed~~ System	~~Absorption Field~~
1. Any water of the Territory		300’	300’	~~300’~~
2. Any dwelling, school, public building, or a building used for commercial or industrial purpose	20’	10’	20’	~~20’~~
3. Property boundary lines		5’	5’	~~5’~~
4. Water lines		10’	25’	
5. Wells*		~~300~~1000~~*~~’	~~300~~1000~~*~~’	~~300*’~~

* This applies only to potable water supply wells, as described and regulated under 22 GAR Chapter 7, Water Resource Development and Operating Regulations.

TABLE II – B
MINIMUM SAFE HORIZONTAL DISTANCES IN FEET
FOR TYPE 4 TOILET FACILITIES AND HOLDING TANKS

From	To		
	Holding Tank	Treatment Tank	Soil Absorption System
1. Any water of the Territory	50**/150’	300’	300’
2. Any dwelling, school, public building, or a building used for commercial or industrial purpose	20’	10’	20’
3. Property boundary lines	5’	5’	5’
4. Water lines		10’	25’
5. Wells*	300*’	300*’	300*’

* This applies only to potable water supply wells, as described and regulated under 22 GAR Chapter 7, Water Resource Development and Operating Regulations.
** 50′ only for facilities that have a legitimate government or commercial need to be in such close proximity to waters of the territory, and only with specific written approval from the Administrator, contained in the permit approval letter.

GEPA NOTE:

1. Should there be any legislative amendment to any minimum safe distance requirement, the latest amendment shall govern.
2. No septic, treatment, or holding tank shall be constructed in a position not easily accessible for emptying or cleaning.
~~*3. Minimum distances from well to sources of bacterial contamination.~~

~~Formation~~	~~Minimum Acceptable Distance~~
~~Favorable (Unconsolidated)~~	~~300 feet. Lesser distances only on Administrator's approval following comprehensive sanitary survey of proposed site and immediate surroundings.~~

~~Unknown~~	~~300 feet only after comprehensive geological survey of the site and its surroundings has established, to the satisfaction of the Administrator, that favorable formations exist.~~
~~Poor (Consolidate)~~	~~Safe distances can only be established following both the comprehensive geological and comprehensive sanitary surveys. These surveys also permit determining the direction in which a well may be located with respect to sources of contamination. In no case should the acceptable distance be less than 300 feet.~~

§ 12109. Area of ~~Disposal Fields~~ Soil Absorption Systems.

The minimum effective absorption area required for ~~disposal fields~~ soil absorption systems in square feet of absorption ~~leachfield~~ bed (leaching field), shall be predicated on the wastewater loading, soil conditions and ~~required size of septic tank for the type of~~ soil percolation rate as established in Table III - "Guidelines for Construction of Septic Tank and ~~Leachfield~~ Soil Absorption Systems on Guam".

§ 12110. Septic Tank Design and Construction ~~(Figures 3 and 3A)~~.

(a) Septic tank design shall be such as to provide access for cleaning, adequate volume for settling, and for sludge and scum storage. The structural design shall provide for a sound durable tank which will sustain all loads and pressures and will resist corrosion.

(b) Location shall be such as to provide not less than the stated distances in Figure 1 and Table II.

(c) Liquid capacity shall be based on the number of bedrooms proposed or reasonably anticipated and shall be at least as required in Table I.

(1) The liquid depth of the tank or compartment thereof shall be five (5) feet and not more than six (6) feet. A liquid depth greater than six (6) feet shall not be considered in determining tank capacity;

(2) No tank or compartment thereof shall have an inside horizontal dimension of less than four (4) feet or 48 inches. Scum storage shall equal 15% of the total liquid depth and shall be measured from the top of the liquid level to the vertical top of the inlet tee and outlet tee excluding the one (1) inch air space at the top of the tank. In no case shall this area be less than seven (7) inches;

(3) The vertical leg of the inlet tee shall not be less than six (6) inches below the liquid surface and above the liquid surface as required in (c)(2) above.

(d) Inlet and outlet connections must be located no less than six (6) feet apart and shall be submerged so as to obtain effective retention of scum and sludge. The inlet invert shall be at least three (3) inches above the outlet invert. Access to both inlet and outlet connections shall be provided through manholes or inspection ports.

(e) The vertical leg of the outlet tee shall extend upward to within 1 inch of the underside of the cover and downward to a point which is 40% of the liquid depth below the liquid surface. When a partition wall is used to subdivide the tank, it shall have a 4 inch diameter minimum opening, with the same invert elevation as the tank outlet (See Figure 3A). The partition wall opening shall have an outlet device equivalent to the tank inlet or outlet, so that outside air can enter both sides of the partition.

(f) When multi-compartment tanks are used, the volume of the first compartment shall be equal to or greater than that of any compartment.

(g) Access to each compartment of the tank shall be provided by a 18" x 18" minimum manhole or removable cover. The inlet and outlet tee connections shall also be accessible through properly placed manholes, handholes or by easily removed covers.

(h) Where the top of the septic tank is below ground grade level, manholes shall be built up to ground grade level.

~~(i)~~ Concrete septic tanks shall be pre-cast or site-constructed meeting the requirements of Section 504.1.1 of the current edition of the International Private Sewage Disposal Code as adopted under the Building Law at 21 GCA § 67101.4, and ASTM C 1227 as required therein. The floor and walls of a site-constructed tank must be monolithic in construction, except that a construction joint may be allowed in the lower 12 inches of the sidewalls, with a keyway meeting the width requirements as specified in the IPSDC. The minimum compressive strength of any concrete septic tank wall, top and covers, or floor shall not be less than 4000 psi (pound per square inch) at 28 days in accordance with ASTM C1227. Septic tanks constructed using hollow block, concrete masonry units (CMUs) shall not be permitted. Other septic tank types shall be evaluated and approved by the Administrator but must be allowable under the IPSDC. ~~The wall of the tank shall not be less than 4 inches thick reinforced concrete poured in place, or~~ not ~~less than 8 inches thick load bearing concrete hollow block reinforced at every 16" on center laid on a solid foundation and mortar joints well filled, plastered with 1/2 inch concrete mortar in the inside of the tank. The tank covers and floor slabs shall be not less than 6 inch thick reinforced concrete. Septic tank covers may either be poured in place or pre cast. The minimum compressive strength of any concrete septic tank wall, top and covers, or floor shall not be less than 2500psi (pound per square inch).~~

~~(j) All septic tank covers shall be capable of supporting an earth load of not less than 300 pounds per square foot where the maximum coverage does not exceed three (3) feet.~~ All septic tanks shall be subjected to a water-tightness test as follows (ASTM C 1227): fill the tank to the outlet invert elevation, cover the tank, and let stand for 24 hours. Refill tank. The tank is approved if the water level is held for one (1) hour after refilling. GEPA shall observe the water level at the start and end of the 24 hour hold time, and at the start and end of the one (1) hour test.

(k) After the completion of the septic tank, the inside shall be cleaned, ~~and~~ all forms removed, and the tank shall pass the required water-tightness test before occupancy permits will be issued.

FIGURE DELETED – NO LONGER APPLICABLE

§ 12111. Percolation Tests.

(a) Individual residences. The absorption areas for ~~disposal field~~ soil absorption systems for individual residences whenever applicable shall be computed or determined from Table III when sufficient information about area soils is available.

(b) In addition to the test hole required in order to develop the log of soil formations underlying the site, ~~A~~all proposed sites shall be subjected to percolation tests acceptable to the Administrator ~~if~~ unless it is determined that ~~in~~sufficient information exists concerning the permeability characteristics of soils within the proposed site.

(1) For individual lots, one (1) percolation test per lot is required as a minimum, and shall be performed at the location of the proposed soil absorption system ~~field~~. Where the soil is not uniform or there is more than one type of soil on the lot, one percolation test is required as a minimum at the center of each variation or type of soil that exists within the soil absorption system ~~disposal field~~ area.

(2) For subdivisions or multiple lots, a sufficient number of percolation tests must be performed to determine the general acceptability of the area. Final ~~disposal field~~ soil absorption system size must be based on a minimum of one test per site.

(c) Test Procedure (Figure 5). All percolation tests required should be performed in accordance with the following:

(1) Dig or bore the holes with horizontal dimensions from 4 to 12 inches and vertical sides to the depth of the bottom of the proposed absorption device. Holes can be bored with 4 inch diameter post-hole type auger.

(2) Roughen or scratch the bottom and sides of the holes to provide a natural surface. Remove all loose materials from the hole. Place about 2 inches of coarse sand or fine gravel in the hole to prevent bottom scouring.

(3) Fill the hole with clear water to a minimum depth of 12 inches over the gravel. By refilling, or by supplying a surplus reservoir of water (automatic siphon), keep water in hole for at least four hours, and preferably overnight. In granular soils, ~~i.e.,~~ such as those classified as GW, GP, SW, or SP ~~classified~~ according to the Unified Soils Classification System,~~"~~ the test can be made after the water from one filling has seeped away.

(4) Percolation rate measurements should be made on

the day following the saturation process, except in sandy soils.

(5) If water remains in the test hole after overnight saturation, adjust the depth to 6 inches over the gravel. From a fixed reference point, measure the drop in water level at approximately 30-minute intervals over a 4-hour period. The drop which occurs during the final 30-minute period is used to calculate the percolation rate. It must be noted that if a soil or site is determined to be poorly drained with an accompanying high water table, it is unsuitable regardless of percolation test data.

(6) If no water remains in the hole after overnight saturation, add clear water to a depth of about six inches over the gravel. From a fixed reference point, measure the height of the water surface at approximately 30 minute intervals over a 4-hour period, refilling the hole to a depth of six inches when the percolation rate indicates the hole will run dry before the next reading is made. The drop which occurs during the final 30-minute period is used to calculate the percolation rate. It should be noted that if a hole must be refilled to obtain a final 30-minute reading, determine from the previous reading the water level drop during that interval, add water until the level above the bottom equals this figure plus one-half inch. Continue the test, measuring the drop during the final 30-minute period.

(7) In sandy soils~~,~~ or other soils in which the first six (6) inches of water seeps away in less than 30 minutes, after the overnight saturation period, the time interval between measurements can be taken as 10 minutes and the test run over a period of one hour. The drop which occurs in the final 10-minute period is used to calculate the percolation rate.

2023 NOTE: In the 1997 printed GAR publication, subsection (a) stated: "(a) Individual residences. The absorption areas for disposal field and seepage pits for individual residences whenever applicable shall be computed or determined from Table III when sufficient information about area soils is available." However, "and seepage pits" is not in the GEPA document and has been omitted here.

§ 12112. Subsurface Soil Absorption Systems ~~(Figure 4)~~.

(a) Bed Construction (Figure 4)

Where percolation rates are faster than 1" per 30 minutes and soil characteristics and site conditions are acceptable to the Administrator, a~~n absorption~~ bed-type soil absorption system may be installed.

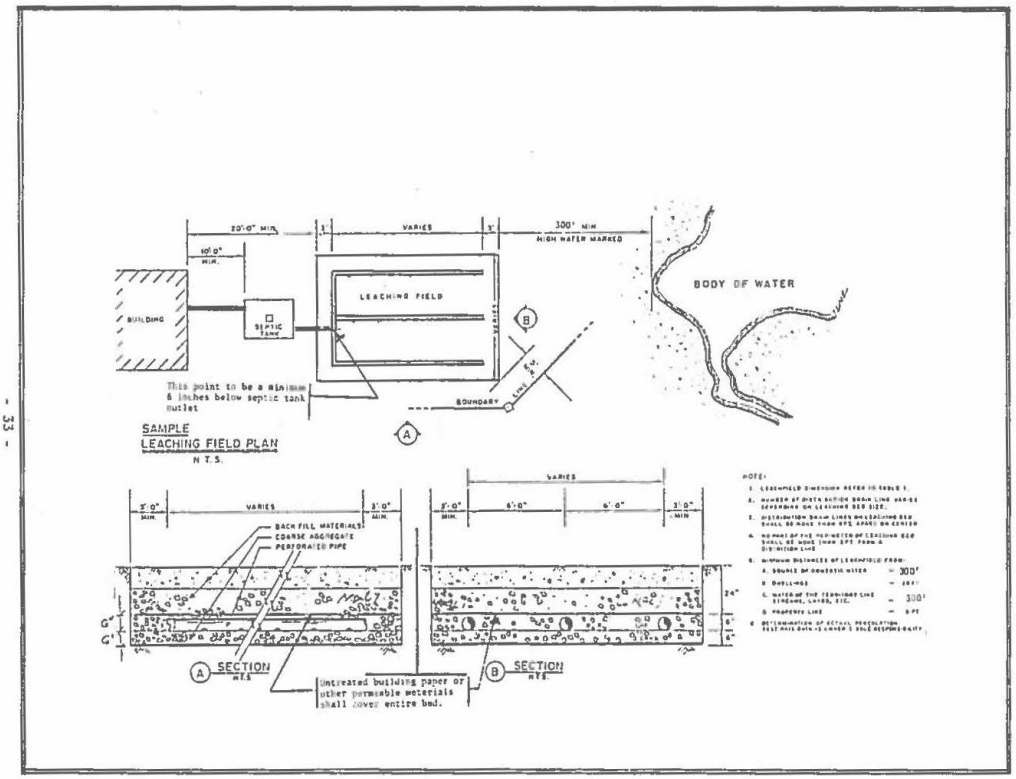
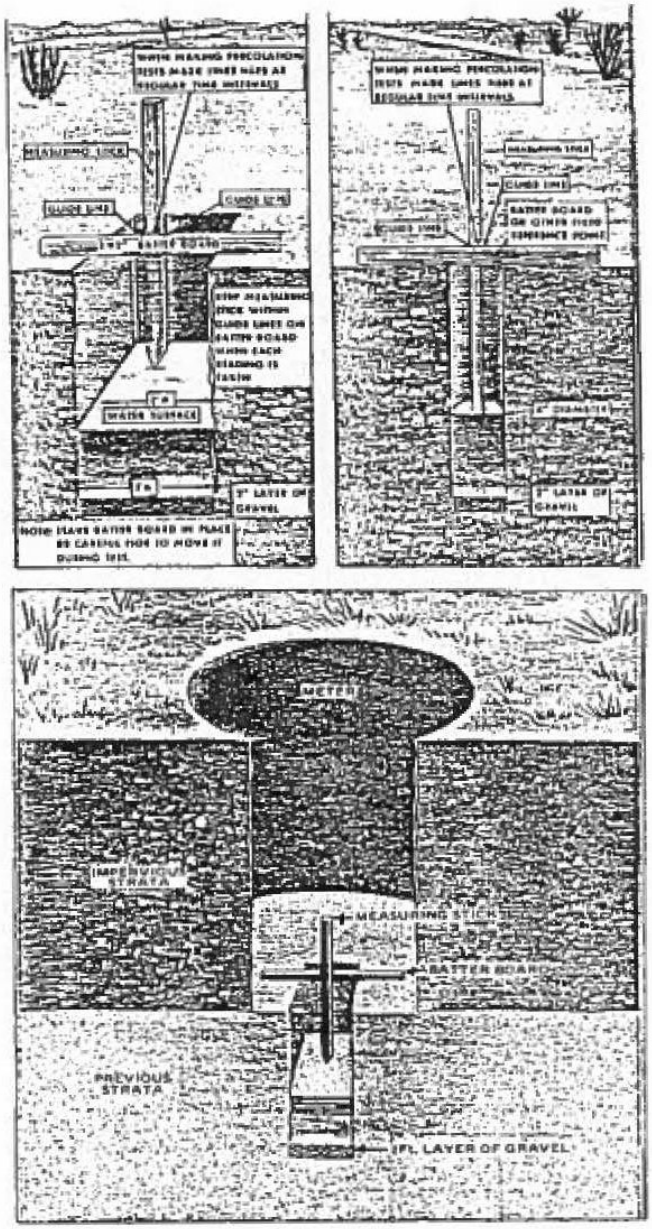


Figure 4

(b) Trench Construction (Figure 5)

Where percolation rates are 1" per 30 minutes or slower but faster than 1" per 60 minutes and all other soil conditions and site characteristics are acceptable to the Administrator, a~~n absorption~~ trench-type soil absorption system must be installed. Minimum required absorption areas are given in Table III. For a bed type system, ~~this~~ the absorption area in the table represents the floor area of the bed. For a trench type system, the absorption area in the table represents the bottom area of the trench. The standard trench width is three feet.

Figure 5 - METHODS OF MAKING PERCOLATION TESTS



SOURCE: Public Health and Social Services, No. 526

TABLE III
GUIDELINES FOR CONSTRUCTION OF SEPTIC TANK AND ~~LEACHFIELD~~ SOIL ABSORPTION SYSTEM ON GUAM

Number of Bedrooms	Wastewater Flow (~~gpd~~GPD)	Septic Tank Capacity (~~gal~~Gallons)	Percolation Test Rate	Required Absorption Area (Sq. Feet)
2	480	750	1" – 5 min	250
			1" – 10 min	330
			1" – 15 min	380
			1" – 30 min	500
			1" – 45 min	600
			1" – 60 min	800
3	750	1,080	1" – 5 min	328
			1" – 10 min	450
			1" – 15 min	554
			1" – 30 min	800
			1" – 45 min	900
			1" – 60 min	1,200
4	960	1,440	1" – 5 min	436
			1" – 10 min	600
			1" – 15 min	738
			1" – 30 min	1,070
			1" – 45 min	1,200
			1" – 60 min	1,600
5	1,200	1,800	1" – 5 min	545
			1" – 10 min	750
			1" – 15 min	924
			1" – 30 min	1,340
			1" – 45 min	1,500
			1" – 60 min	2,000
6	1,440	2,160	1" – 5 min	660
			1" – 10 min	900
			1" – 15 min	1,100
			1" – 30 min	1,600
			1" – 45 min	1,800
			1" – 60 min	2,400

SOURCE: GEPA, Rural Islandwide Facilities Plan, Table 5-2, Page 5-17.

TABLE III – A
RECOMMENDED MINIMUM ~~LEACHFIELD~~ SOIL ABSORPTION SYSTEM SIZES

No. of Bed-rooms	Daily Sewage Flow Gallons* (GPD)	Tank Capacity (Gallons)	Percolation Test Rate	Required Absorption Area (Gal/SF/Day)	~~Leaching Field~~ Bed Dimension	Absorption Area (Sq. Feet)
2	480	750	1″-5 Min.		12' x 21'	250 ~~sq.ft.~~
			1″-10 Min.		18' x 20'	330 ~~sq.ft.~~
			1″-15 Min.		18' x 22'	380 ~~sq.ft.~~
			1″-30 Min.		Trench	500 ~~sq.ft.~~
			1″-45 Min.		System	600 ~~sq.ft.~~
			1″-60 Min.		Required	800 ~~sq.ft.~~
3	750	1,080	1″-5 Min.	2.2g/da.	18' x 19'	328 ~~sq.ft.~~
			1″-10 Min.	1.6g/da.	18' x 25'	450 ~~sq.ft.~~
			1″-15 Min.	1.3g/da.	18' x 31'	554 ~~sq.ft.~~
			1″-30 Min.	0.9g/da.	Trench	800 ~~sq.ft.~~
			1″-45 Min.	0.8g/da.	System	900 ~~sq.ft.~~
			1″-60 Min.	0.6g/da.	Required	1,200 ~~sq.ft.~~
4	960	1,440	1″-5 Min.		18' x 25'	436 ~~sq.ft.~~
			1″-10 Min.		18' x 34'	600 ~~sq.ft.~~
			1″-15 Min.		18' x 41' or 24 x 31	738 ~~sq.ft.~~
			1″-30 Min.		Trench	1,070 ~~sq.ft.~~
			1″-45 Min.		System	1,200 ~~sq.ft.~~
			1″-60 Min.		Required	1,600 ~~sq.ft.~~
5	1,200	1,800	1″-5 Min.		18' x 31'	545 ~~sq.ft.~~
			1″-10 Min.		18' x 42'	750 ~~sq.ft.~~
			1″-15 Min.		24' x 38'	924 ~~sq.ft.~~
			1″-30 Min.		Trench	1,340 ~~sq.ft.~~
			1″-45 Min.		System	1,500 ~~sq.ft.~~
			1″-60 Min.		Required	2,000 ~~sq.ft.~~
6	1,440	2,160	1″-5 Min.		18' x 37'	660 ~~sq.ft.~~
			1″-10 Min.		24' x 38'	900 ~~sq.ft.~~
			1″-15 Min.		30' x 37'	1,100 ~~sq.ft.~~
			1″-30 Min.		Trench	1,600 ~~sq.ft.~~
			1″-45 Min.		System	1,800 ~~sq.ft.~~
			1″-60 Min.		Required	2,400 ~~sq.ft.~~

~~(c)~~ Subsurface ~~leaching~~ soil absorption systems, if found to be applicable by percolation test, should be designed and constructed in accordance with Table III and III-A~~, and the following items:~~.

(1) The minimum distances ~~given below~~ identified in Tables II – A or II –B, accordingly, shall be used when determining where the disposal field can be located.~~:~~

~~(A) Sources of domestic water supplies — 300 ft.~~

~~(B) Water of the territory ———————— 300 ft.~~

~~(C) Dwellings~~

~~(i) Septic tank ---------- 10 ft.~~

~~(ii) Leaching System ------ 20 ft.~~

~~(iii) Privy ---------- 20 ft.~~

~~(D) Property lines ---------- 5 ft.~~

~~(E) Wells ---------- 300 ft.~~

~~[GEPA] NOTE: When existing wells are involved or exceptionally coarse soil formations are encountered, the 300 foot distance from any water supply shall be evaluated and separations maintained in accordance with the recommendations of the Administrator.~~

(d) Construction of a ~~leachfield~~ subsurface soil absorption system in filled ground is not acceptable.

(1) All ~~leaching fields~~ subsurface soil absorption systems shall be constructed within the following standards:

TABLE IV
SUBSURFACE ~~LEACHING FILED~~ SOIL ABSORPTION SYSTEM CONSTRUCTION DETAILS

		Bed		Trench	
Item	Unit	Max.	Min.	Max.	Min.
Number of Distribution Drain lines	----	7	2	8	2
Distance from drain line along perimeter of leachbed	feet	3	3	1-1/2	---
Length of ~~Leach Field~~ Bed	feet	100	21	100'	---
Width of ~~Leach Field~~ Bed	feet	50	12	3'	3'
Depth of ~~Leach Field~~ Bed Bottom	inches	48	24	48	24
Depth of course material:					
Under pipe (Min.)	inches		6		6
Over pipe (Min.)	inches		2		2
Total (Min.)	inches		12		12
Size of course material	inches	2-1/2	3/4	2-1/2	3/4
Depth of backfill over course material	inches	36	12	36	12
Distance between Drain lines center to center	feet	6	---	---	6

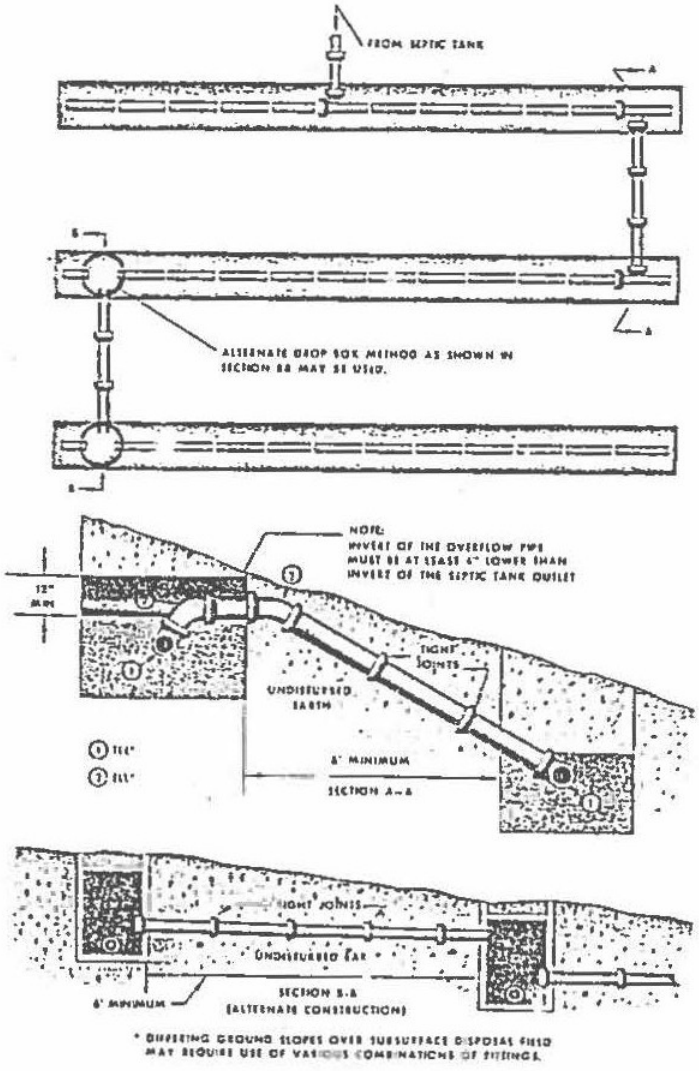
(Exceptions to the above table may be made by GEPA when Soil conditions warrant.)

(e) Distribution drain lines shall be constructed of perforated PVC pipes or perforated clay pipes or other approved materials may be used, provided that sufficient openings are available for distribution drain lines of the effluent into the ~~leach~~

bed or trench area.

(f) Before placing filter material or drain lines in a prepared excavation, all smeared or compacted surfaces shall be removed from leaching bed area by raking to a depth of 1-inch and the loose material removed. Clean stone, gravel slag or similar filter material acceptable to the Administrator, varying in sizes from 3/4" to 2-1/2" shall be placed in the trench to the depth and grade required in Table IV and Figure 4 and Figures 5, 5A and 5B.

Drain lines shall then be covered with filter material to the minimum depth required on Table IV and the entire bed or trench area covered with untreated building paper, straw, or similar porous material which will prevent closure of voids within the gravel fill. No earth backfill shall be placed over the filter material cover until after inspection and acceptance by the Administrator or his authorized representative.



* DIFFERING GROUND SLOPES OVER SUBSURFACE DISPOSAL FIELD MAY REQUIRE USE OF VARIOUS COMBINATIONS OF FITTINGS.

A relief line arrangement for serial distribution.

Figure 5A

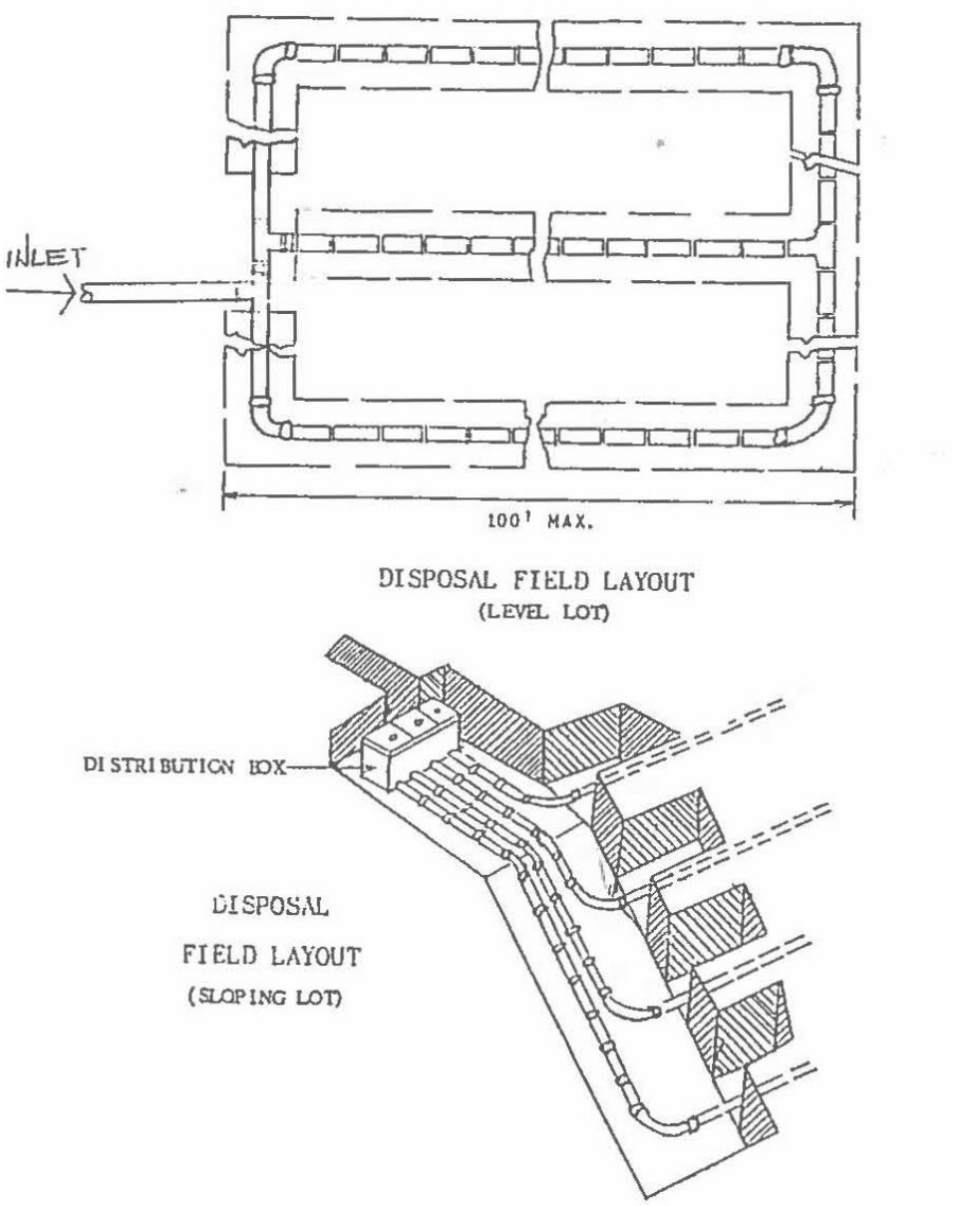


Figure 5B

(g) Connections between a septic tank and main distribution line shall be laid with approved pipe with water tight joints on natural ground or compacted fill.

(h) ~~Disposal or leaching field~~ The subsurface soil absorption system (bed or trench) shall be constructed as follows:

	Bed	Trench
Minimum number of drain lines ----------	2	4
Maximum length of each line ----------	100 feet	100'
Minimum bottom width of ~~leachfield~~ bed ---------	12 feet	3'
Maximum bottom width of ~~leachfield~~ bed ---------	50 feet	3'
Minimum bottom width of ~~leachfield~~ bed ---------	21 feet	3'
Maximum bottom length of ~~leachfield~~ bed --------	103 feet	103'
Minimum spacing of drain lines center to center	6 feet	6'
Preferred depth of cover of lines ----------	24 inches	24"
Minimum depth of earth cover over ----------	12 inches	12"
Minimum filter material under drain lines -----	6 inches	6"
Minimum filter material over drain lines -------	2 inches	2"
Minimum Total Filter Material ----------	12 inches	12"
* Maximum grade of lines ----------	6 inches	100'
* Minimum grade of lines ----------	3 inches	100'

GEPA NOTE:
*When perforated pipe is used, it shall be laid level and with the end of the line capped. Where ~~leaching~~ beds are permitted, distribution drain lines in ~~leaching~~ beds shall not be more than six (6) feet apart on centers and no part of the perimeter of the leaching bed shall be more than three (3) feet from a distribution drain line. When necessary on sloping ground to prevent excessive line slope, leach lines or leach beds shall be stepped. The lines between each horizontal section shall be made with watertight joints and shall be utilized to the maximum capacity before the effluent shall pass to the next lower leach line or bed. The lines between each horizontal leaching section shall be made with approved watertight joints.

§ 12113. Mound Systems.

Where a site is found to not be suitable for the installation of a subsurface soil absorption system due to the presence of shallow groundwater or bedrock near the soil surface, a mound system may be possible. Mound systems are a Type 2 Toilet Facility that use pressure distribution of effluent to an above-grade bed of engineered soil (the "mound") which can facilitate the absorption of effluent in the upper portions of soil that lie above the restricting condition (seasonally high groundwater or bedrock). Mound systems require the use of a pump to distribute effluent to the above-grade bed, and as such, are somewhat more complex and expensive to operate than a conventional soil absorption system, but much less expensive and troublesome than a holding tank. A mound system is not possible on every site, and installation of a mound system does not always guarantee success.

(a) Mound systems must be designed and constructed in strict accordance with the applicable provisions of Chapters 7, 8,

and 9 of the current edition of the International Private Sewage Disposal Code (IPSDC - International Code Council, Inc., https://codes.iccsafe.org/) as adopted under the Building Law at 21 GCA § 67101.4.

(b) As specified in Section 902 of the IPSDC, minimum soil depths for mound system installation are as follows:

Restricting Factor	Minimum Soil Depth to Restriction (inches)
High ground water	24
Impermeable rock strata	60
Pervious rock	24
Rock fragments (50-percent volume)	24

(c) Installation and commissioning of mound systems must be done under the supervision of an installer approved by GEPA under § 12118.

(d) Because of the additional complexities and risks inherent with operating and maintaining a mound system, an owner of a mound system is required to obtain an operation permit as required under § 12118.

§ 12114. Type 4 Toilet Facilities.

Additional permit application, design, and construction requirements shall apply for Type 4 toilet facilities (advanced nitrogen-reducing onsite disposal systems) as follows.

(a) All Type 4 toilet facilities must be listed as approved under NSF/ANSI Standard 245, Wastewater Treatment Systems – Nitrogen Reduction.

(1) The applicant must provide manufacturer documentation of NSF-245 certification for the proposed Type 4 toilet facility which will be installed as part of their permit application.

(2) The Guam Environmental Protection Agency (GEPA) shall independently verify NSF-245 certification status using the publicly available NSF-245 product listing. The Administrator shall not approve any Type 4 toilet facility that is not listed by NSF as being NSF-245 certified.

(b) All applications for Type 4 toilet facilities must include a valid operation and maintenance contract which meets the relevant requirements of §12117 of this Chapter.

(c) The Administrator may approve, upon concurrence of the

Chief Engineer, a reduction of the required soil absorption system area for Type 4 toilet facilities of up to 50%, if supported by an engineering soils report which addresses the following:

(1) A percolation test report must be provided which shows that the measured percolation rate within the area of the proposed soil absorption system is 1 inch in 15 minutes (4 inches per hour) or faster;

(2) The soil type at the depth of the proposed soil absorption system is granular or limestone, and is not clayey; and

(3) The certifying engineer must specify the recommended percentage reduction in required soil absorption area (up to 50% maximum), and must include a signed statement that the site soil and hydrologic characteristics will support the proposed reduction in soil absorption system area.

(d) Installation and commissioning of Type 4 toilet facilities must be done under the supervision of an installer or operation and maintenance provider approved by GEPA under § 12118(b).

§ 12115. Holding Tanks.

Where site limitations of hydrology and/or soil type are such that methods of on-site wastewater disposal described herein cannot be utilized, the possibility of storing a dwelling's or small government or commercial operation's wastewater in water-tight tanks (holding tanks), with periodic pumping by a hauler registered under § 12120 of this Chapter may be permitted in very limited circumstances.

A holding tank is not seen as a viable or sustainable long-term solution to on-site treatment and disposal of wastewater for many uses, including residential, because of: (1) the high cost of pumping; (2) the inconvenience of using a holding tank, where for some periods of time the building plumbing cannot be used until a registered hauler is able to remove the wastes; and (3) the potential for impacts to public health caused by illicit discharge, whether through overflow or illegal conversion to a cesspool as a result of the high cost and inconvenience of operating a holding tank.

(a) Holding tanks for new buildings may be permitted only if all of the following conditions are met:

(1) There is no available sewer;

(2) A soil absorption system is not possible due to site hydrology or soil conditions;

(3) The purpose of operating a holding tank is not to evade any required setback distances or lot sizes under this Chapter;

(4) The holding tank is for a single family dwelling, government-owned and operated facility, or commercial facility specifically approved in writing by the Administrator;

(5) The owner and (as applicable) renter or lessee obtains and provides to GEPA a valid operation and maintenance contract which meets the relevant requirements of §12118 of this Chapter; and

(6) For single-family dwellings, the owner and (as applicable) the renter or lessee occupying the building shall sign and provide to GEPA a statement acknowledging and committing to pay the estimated annual costs and perform the requirements of operating and maintaining the holding tank (using the form provided in Appendix A to this Chapter); or

(7) For government or commercial buildings, the official with expenditure authority or the owner (as applicable) shall provide to GEPA an engineer's economic analysis showing the present value, using a reasonable estimate for inflation, of the total cost to construct, pump and maintain the holding tank for a twenty (20) year period compared the estimated cost to connect the building to sewer. The official with expenditure authority or the owner (as applicable) shall sign a statement acknowledging the engineer's estimate and confirming that the government or commercial entity will pay to properly operate and maintain the holding tank in accordance with this Chapter.

(b) Holding tanks for existing buildings may be permitted only if all of the following conditions are met:

(1) The need for a holding tank is brought about by the failure of the existing private sewage disposal system. A holding tank shall not be permitted for existing buildings seeking expansion.

(2) There is no available sewer.

(3) A soil absorption system is not possible due to site location, hydrology, soil conditions, or other reasons acceptable to the Administrator;

(4) The owner and (as applicable) renter or lessee must obtain and provide to GEPA a valid operation and maintenance contract which meets the relevant requirements

of §12118 of this Chapter; and

(5) For single-family dwellings, the owner and (as applicable) the renter or lessee occupying the building shall sign and provide to GEPA a statement acknowledging and committing to pay the estimated annual costs and perform the requirements of operating and maintaining the holding tank (using the form provided in Appendix A to this Chapter); or

(6) For government or commercial buildings, the official with expenditure authority or the owner (as applicable) shall provide to GEPA an engineer's economic analysis showing the present value, using a reasonable estimate for inflation, of the total cost to construct, pump and maintain the holding tank for a twenty (20) year period compared the estimated cost to connect the building to sewer. The official with expenditure authority or the owner (as applicable) shall sign a statement acknowledging the engineer's estimate and confirming that the government or commercial entity will pay to properly operate and maintain the holding tank in accordance with this Chapter.

(c) Existing holding tanks in use at the time this Regulation became effective may be permitted to continue operating if the following conditions are met and the owner or operator complies with the following requirements no later than one (1) year following the effective date of this Regulation.

(1) An application for a Holding Tank Operating Permit must be submitted in accordance with this Section and § 12118, inclusive of all required documentation.

(2) The owner or operator of the holding tank must provide to GEPA copies of the water service billing statements from the Guam Waterworks Authority (GWA) or relevant Public Water System and copies of the holding tank pumping receipts for the previous twelve (12) months.

(3) The owner or operator of the holding tank must request an inspection of the existing holding tank by GEPA. The holding tank shall be pumped completely empty and cleaned immediately prior to the GEPA-scheduled inspection to enable visual inspection of the tank interior. The owner or operator of the holding tank shall complete any repairs or other work as required by GEPA as a result of the inspection.

(4) The holding tank shall then be subjected to a water tightness test in accordance with subpart (d) of this Section.

(5) If GEPA determines that the tank is unable to hold

liquid without leakage, on the basis of records obtained and/or inspections conducted under this Subpart, and repairs are unsuccessful or deemed by GEPA to not be feasible, the owner shall be required to replace the holding tank with a new tank meeting the requirements of this Chapter, including those of subpart (e) of this Section or with another adequate Type 2 or Type 4 toilet facility.

(6) Existing holding tanks must be fitted with warning devices and a vent in accordance with Subpart (d) of this Section.

(7) The owner or (as applicable), operator, renter or lessee must obtain and provide to GEPA a valid operation and maintenance contract which meets the relevant requirements of §12118 of this Chapter; and

(8) For single-family dwellings, the owner and (as applicable) the renter or lessee occupying the building shall sign and provide to GEPA a statement acknowledging and committing to pay the estimated annual costs and perform the requirements of operating and maintaining the holding tank (using a form provided by GEPA to this Chapter); or

(9) For government or commercial buildings, the official with expenditure authority or the owner (as applicable) shall provide to GEPA an engineer's economic analysis showing the present value, using a reasonable estimate for inflation, of the total cost to construct, pump and maintain the holding tank for a twenty (20) year period compared the estimated cost to connect the building to sewer. The official with expenditure authority or the owner (as applicable) shall sign a statement acknowledging the engineer's estimate and confirming that the government or commercial entity will pay to properly operate and maintain the holding tank in accordance with this Chapter.

(10) The Administrator may require a building served by an existing holding tank to connect to sewer or request that the Department of Public Works condemn the building if it is found by GEPA that continued service by holding tank is not practical (for example if the daily wastewater flow exceeds typical pump truck capacity), poses a threat to public health or the environment, or for other reasons as justified in writing.

(d) Holding tanks shall be subjected to a water-tightness test as follows (ASTM C 1227): fill the tank to the outlet invert elevation, cover the tank, and let stand for 24 hours. Refill tank. The tank is approved if the water level is held for one (1) hour after refilling. GEPA shall observe the water level at the

start and end of the 24 hour hold time, and at the start and end of the one (1) hour test.

(e) Standards for the sizing, construction, installation, warning devices, manholes, and vents for holding tanks shall be as specified in Section 805 of the current edition of the International Private Sewage Disposal Code (IPSDC - reference) as adopted under the Building Law at 21 GCA § 67101.4. A brief summary of the IPSDC requirements is provided as follows, but this does not replace the need to consult the IPSDC for the specifics.

(1) Table V summarizes holding tank sizing requirements for up to 6 bedrooms, to be consistent with the sizing requirements contained in this Chapter. See the IPSDC for sizing for other uses.

(2) Concrete holding tanks shall be pre-cast or site-constructed meeting the requirements of Section 504.1.1 of the current edition of the IPSDC and ASTM C 1227 as required therein. The floor and walls of a site-constructed tank must be monolithic in construction, except that a construction joint may be allowed in the lower 12 inches of the sidewalls, with a keyway meeting the width requirements as specified in the IPSDC. The minimum compressive strength of any concrete holding tank wall, top and covers, or floor shall not be less than 4000 psi (pound per square inch) at 28 days in accordance with ASTM C1227. Holding tanks constructed using hollow block, concrete masonry units (CMUs) shall not be permitted. Other holding tank types shall be evaluated and approved by the Administrator but must be allowable under the IPSDC.

(3) Holding tanks shall be located so that the servicing manhole is not less than 10 feet from a road or driveway accessible to a pumping truck.

(4) The holding tank must be equipped with warning devices providing either audible or illuminated alarm, meeting the specific requirements of the IPSDC Section 805.5.

(5) Holding tank manholes must meet the requirements of the IPSDC Section 805.6.

(6) Holding tanks shall be provided with a vent meeting the requirements of the IPSDC Section 805.8.

TABLE V
REQUIRED CAPACITY OF HOLDING TANKS

Number of Bedrooms	Holding Tank Capacity

	(gallons)
2	2,000
3	2,000
4	2,500
5	3,000
6	3,500

§ ~~12113~~ 12116. Inspection of Work in Progress.

The project shall be inspected on regular basis by inspectors from the Guam Environmental Protection Agency (GEPA) to ~~assure~~ensure that construction of ~~septic tanks, and leaching soil absorption systems~~ private sewage disposal systems and/or grease traps are in compliance with approved plans and specifications, and in accordance with the Guam Environmental Protection Agency regulations.

GEPA NOTE: In accordance with GEPA standards:

(a) Schedule of concrete pouring must be made at least twenty- four business hours in advance and work must be performed in the presence of an Environmental Inspector.

(b) Inspection before covering. No cover shall be placed over any septic tank, until the depth and other interior dimensions of such septic tank, have been inspected and approved by the Administrator.

(c) It shall be the duty of the permit holders pursuant to this regulation to notify the Agency issuing the permit when (a) and/ or (b) above are ready for inspection.

Failure to comply with the above requirements may result in unnecessary delays to the project or a suspension of work or denial of a Certificate of Occupancy and an order to remove portions or all of the offending structures.

After completion of the project, final inspection by a GEPA inspector shall be conducted on septic tanks, ~~and leaching~~ soil absorption systems, and other private sewage disposal system components to assure that the work is in accordance with the approved plans and specifications and that GEPA requirements are met.

§ ~~12114~~ 12117. Stop Work Orders.

~~In the event a project is commenced without a septic tank and leaching system permit, or work performed is not in~~

~~accordance with approved plans and specifications or any approved changes or revisions thereto, or unsafe construction practices are continued after sufficient warnings by the Administrator or his authorized representatives, a STOP WORK ORDER shall be issued and take effect until the conflict is resolved.~~ Issuance and enforcement of Stop Work Orders shall follow the requirements of 10 GCA Chapter 48.

§ 12118. Operating Permits.

Operating permits are required to discharge wastewater from Type 4 toilet facilities, mound systems~~,~~ and holding tanks.

(a) Operating permits for new Type 4 toilet facilities and mound systems. An operating permit for a Type 4 toilet facility or mound system shall be valid for a period of two (2) years following issuance. An operating permit for a new Type 4 toilet facility or mound system may be issued by GEPA if all of the following requirements are met:

(1) Certification that the Type 4 toilet facility or mound system has been properly constructed, commissioned, and is operating adequately must be provided in writing by the GEPA-approved installer.

(2) The new Type 4 toilet facility or mound system must pass inspection by GEPA.

(3) A valid Type 4 toilet facility operation and maintenance contract must be provided, with a term of no less than two (2) years, signed by both the applicant and the operation and maintenance provider. The operation and maintenance contract must include the following:

(A) The Type 4 toilet facility or mound system must be inspected and serviced at a frequency as required by the manufacturer's operation and maintenance instructions, and on no less than an annual basis;

(B) Any defects found must be corrected, and any faulty Type 4 toilet facility or mound system components must be replaced or repaired as soon as possible;

(C) The solids must be pumped from the Type 4 toilet facility at a frequency not less than that recommended by the manufacturer's operation and maintenance instructions, and no less than once every 3 years for mound systems, by a wastewater hauler registered under this Chapter;

(D) The operation and maintenance provider must be available to respond in a timely manner upon notification by the Type 4 toilet facility or mound system owner or operator, in the event of any alarm or other problem;

(E) Within three (3) months of the end of the contract period, timed such as to allow the timely submission of the operating permit renewal application, the operation and maintenance provider must provide a summary report, in writing, which documents all service and repairs conducted over the term of the contract, any outstanding repair or replacement needs, and a statement certifying that the Type 4 toilet facility or mound system is operating in accordance with manufacturer specifications.

(F) At the discretion of the owner and operation and maintenance provider, the contract may also include services associated with renewal of the Type 4 toilet facility or mound system operating permit on behalf of the owner or operator.

(b) Approval of Type 4 toilet facility or mound system installers and operation and maintenance providers. Any person who proposes to provide installation or operation and maintenance services for Type 4 toilet facilities or mound systems shall first be approved by the Administrator. GEPA will maintain a current list of all approved Type 4 toilet facility and mound system installers and operation and maintenance providers, and this list will be made publicly available at the Agency's office and on the Agency's website. In order to be approved to provide services for Type 4 toilet facilities or mound systems, an interested person must provide documentation demonstrating that the following requirements have been met:

(1) An installation provider must have written manufacturer authorization to perform installation and commissioning (start-up) of the specific Type 4 toilet facilities they intend to provide;

(2) A Type 4 toilet facility operation and maintenance provider, if they are not a manufacturer-authorized installation provider, must provide written manufacturer authorization to purchase parts from each manufacturer of all Type 4 toilet facilities which they intend to service.

(3) A mound system operation and maintenance provider must provide written assurance that they have access to purchase pumps and other system components

necessary to repair the specific mound system they are contracted to service.

(4) Both installation and operation and maintenance providers must have on their staff, or on contract, at least one Class I (or higher) Wastewater Treatment Operator certified under the Water & Wastewater Operator Certification Regulations, 22 GAR Chapter 11.

(5) The Administrator may revoke approval of a Type 4 toilet facility or mound system installer or operation and maintenance provider, in writing and after a review of the facts, for any of the following reasons:

(A) The installer or provider has practiced fraud or deception, or has submitted falsified reports or falsified other records to GEPA;

(B) The installer or provider does not use, in the judgment of the Administrator, reasonable care, judgment, or the application of knowledge in the performance of the provider's duties; or

(C) Agency records indicate that the installer or provider has a history of failing to perform their duties in compliance with the requirements of the Agency.

(c) Operating permits for holding tanks. An operating permit for a holding tank shall be valid for a period of one (1) year following issuance.

(1) An operating permit for a new holding tank for a new or existing building may be issued by GEPA if all of the following requirements are met:

(A) The new holding tank must pass inspection by GEPA, including GEPA observation of the start and end of the water tightness test required under § 12115 (d).

(B) A valid holding tank pumping contract meeting the requirements of subpart (3) of this subsection must be provided to GEPA

(2) An operating permit for an existing holding tank that was in use at the time this Regulation became effective may be issued by GEPA if all of the following requirements are met:

(A) The existing holding tank must pass inspection and approval by GEPA as required under § 12115 (c) and (d).

(B) Copies the water service billing statements

from the Guam Waterworks Authority (GWA) and copies of the holding tank pumping receipts for the previous twelve (12) months must be provided as required under § 12115 (c)(2), and must demonstrate that the existing holding tank does not leak. If these records indicate potential leakage, repairs or replacement of the tank must be completed as required under § 12115.

(C) A valid holding tank pumping contract meeting the requirements of subpart (3) of this subsection must be provided to GEPA.

(3) A holding tank pumping contract must have a term of no less than one (1) year, and be signed by both the applicant and a wastewater hauling service registered under § 12121 of this Chapter. The pumping contract must indicate that the holding tank will be pumped as needed. The operation and maintenance contract must include the following:

(A) A statement that any observed problems, such as (but not limited to) leaks, alarm failures or overflow will be promptly reported to both GEPA and the owner or operator of the holding tank.

(B) At the end of the contract period, the registered wastewater hauling service must provide the owner a listing of all pumping trips to include date and gallons pumped, along with a copy of all pumping receipts.

(C) At the discretion of the owner and registered wastewater hauling service, the contract may also include services associated with renewal of the holding tank operating permit on behalf of the owner or operator.

(d) Pursuant to 10 GCA Chapter 45, Sec 45106, operating permits for other types of onsite wastewater treatment and disposal systems will be developed by Guam EPA on a case-by-case basis in accordance with applicable Federal and Territorial requirements.

(e) Required Conditions for operating permits will be defined in each permit.

(f) Applications for new operating permits.

(1) Applications for new Type 4 or mound system operating permits shall be submitted prior to issuance of a Certificate of Occupancy, using the relevant form provided

by GEPA. Supporting documents shall include:

(A) A Certificate of Commissioning as required under subpart (a)(1) of this section;

(B) An Operation and Maintenance Contract as required under subpart (a)(3) of this section; and

(C) A completed GEPA inspection form indicating approval of the Type 4 or mound-type toilet facility.

(2) Applications for new holding tank operating permits (for both new holding tanks and holding tanks in use at the time this Regulation became effective) shall be submitted prior to issuance of a Certificate of Occupancy using the relevant form provided by GEPA. Supporting documents shall include;

(A) For single-family dwellings, a statement signed by the owner, and (as applicable) the renter or lessee occupying the building acknowledging and committing to pay the estimated annual costs and perform the requirements of operating and maintaining the holding tank (using a form provided by GEPA);

(B) For government buildings, an engineer's economic analysis showing the present value, using a reasonable estimate for inflation, of the total cost to construct, pump and maintain the holding tank for a twenty (20) year period compared the estimated cost to connect the building to sewer, and a statement signed by the official with expenditure authority or the owner (as applicable) acknowledging the engineer's estimate and confirming that the government will pay to properly operate and maintain the holding tank in accordance with this Chapter.

(C) A holding tank pumping contract meeting the requirements of subpart (c)(3) of this section; and

(D) A completed GEPA inspection form indicating approval of the holding tank.

(3) Applications for operating permits for other onsite wastewater treatment and disposal systems will be developed on a case-by-case basis in accordance with applicable Federal and Territorial requirements.

(g) Renewal of operating permits.

(1) Renewal applications for Type 4 or mound system operating permits shall be submitted at least one (1)

month prior to expiration of the previous operating permit, using the relevant form provided by GEPA. Supporting documents shall include:

(A) A new two (2) – year Operation and Maintenance Contract meeting the requirements of subpart (a)(3) of this section; and

(B) An "end of contract" summary report, which documents all service and repairs conducted over the term of the contract, any outstanding repair or replacements needs, and a statement certifying that the Type 4 toilet facility or mound system is operating in accordance with manufacturer specifications, as required under subpart (a)(3)(E) of this section;

(2) Renewal applications for holding tank operating permits shall be submitted at least one (1) month prior to expiration of the previous operating permit, using the relevant form provided by GEPA. Supporting documents shall include;

(A) A statement signed by the owner, and (as applicable) the renter or lessee occupying the building acknowledging and committing to pay the estimated annual costs and perform the requirements of operating and maintaining the holding tank (using a form provided by GEPA);

(B) The listing provided by the registered wastewater hauling service of all pumping trips to include date and gallons pumped, along with a copy of all pumping receipts;

(C) A copy of all water service billing statements for the term of the previous contract, for the purpose of determining potential leakage of the holding tank through comparison with the pumping log; and

(D) A new one (1) – year holding tank pumping contract meeting the requirements of subpart (c)(3) of this section.

(h) Non-transferability of operating permits.

Operating permits are not transferrable to new owners, renters, or lessees. Upon change in ownership or occupancy, the new owner, renter, or lessee must apply for a new operating permit.

(i) Failure to renew an operating permits.

Failure to renew an operating permit shall be considered a violation under this Chapter.

§ ~~12115~~ 12119. Certificate of Occupancy.

After final inspection of the ~~septic tank and leaching soil absorption~~ private sewage disposal system indicates that the work performed was done in accordance with approved plans and specifications, and after review of all documentation required under this Chapter has been completed and has met all GEPA requirements, the Administrator or his authorized representative shall issue a Certificate of Occupancy.

§ ~~12116~~ 12120. Temporary Toilet Facilities (TTF).

(a) Temporary Toilet Facilities (TTF) shall be provided for:

(1) any construction job-site where working toilets connected to an approved type sanitary disposal system are insufficient or unavailable or such facilities are determined to be not readily available for the needs of the employees.

(A) The number of facilities required, whether permanent, temporary or combination thereof shall be in accordance with the requirements detailed in Table VI.

(B) The term readily available as used in item (i) above, shall be defined as being within 300 feet of the work area. Facilities which are within this distance but are not under the direct control of the developer/contractor shall require a written authorization/certification from the owner of such facilities that unrestricted access to these toilet facilities will be available to the contractors / workers for the entire period of the construction project.

(C) All arrangements for sanitary facilities must be made and in place before any clearing or construction may proceed.

(2) any carnival, fair, sporting event, outdoor concert or large public gathering requiring a permit, hereafter, collectively referred to as a "special event", where adequate working toilet facilities connected to a sanitary sewer does not exist. Adequacy shall be determined from the Table VII - Toilet Receptacles Required for Special Events.

(b) Temporary Toilet Facilities may be chemical, recirculating or combustion, providing they comply with existing Guam Codes.

(c) The minimum number of TTF required for construction

site shall be based in accordance with Table VI below:

(i) Table VI - Number of TTF required for construction sites

Number of Employees	Minimum Number of Units
1 to 15	1
16 to 30	2
31 to 51	3
52 to 72	4
73 to 93	5
Over 93	1 Add'l unit/20 employees

(ii) The minimum number of temporary toilet receptacles at any special event shall be in accordance with Table VII below:

TABLE VII
TOILET RECEPTACLES REQUIRED FOR SPECIAL EVENTS (MINIMUM)

	Number of Event Hours									
Number of Attendees	1	2	3	4	5	6	7	8	9	10
1,000 or below	1	1	1	2	2	2	3	3	3	4
2,000	1	2	2	3	4	4	5	6	6	7
3,000	1	2	3	4	5	6	7	8	9	10
4,000	2	3	4	6	7	8	9	12	12	14
5,000	2	4	5	7	9	10	12	15	17	19
6,000	2	4	6	8	10	12	14	16	18	20
7,000	3	5	7	10	12	14	17	19	21	24
8,000	3	6	8	11	14	16	19	22	24	27
9,000	3	6	9	12	15	18	21	24	27	30
10,00	4	7	10	14	17	20	24	27	30	34

Numbers highlighted in gray are the # of TTF required

Ref.: Satellite Industries of Minneapolis, Minn. Portable Sanitation Unit Calculator for Special Events.

(d) Any construction site or special event requiring GEPA approval for permitting will provide proof that the minimum required number of toilet facilities are available or will be available for the period of time that the permits are valid.

(e) Failure to comply

(i) Any construction site not complying with the minimum number of TTF will be given a written warning and given 48 hours to comply.

Failure to comply within the given period will result in the revocation of the GEPA approval required for the building permit which will temporarily suspended all construction at this site.

(ii) Any special event not meeting the minimum number of TTF will have its permit to operate immediately suspended.

§ ~~12117~~ 12121. Cleaning Wastewater Systems, Disposal of Wastewater, Requirements and Procedures.

(a) No person shall engage in the business of cleaning ~~individual~~ private sewage disposal systems, grease traps, or disposing of the waste therefrom unless~~;~~ a business license has been secured from the Department of Revenue and Taxation, and Registration has been issued to him by the administrator. Such business shall be conducted in conformity with the following requirements and in accordance with the regulations.

(1) The name and address of the person, shall be legibly lettered on both sides of each vehicle used for cleaning purposes.

(2) Every vehicle used for cleaning purposes shall be equipped with a watertight tank or body and be maintained in a clean and sanitary condition. Sewage waste shall not be transported in an open body vehicle.

(3) All portable receptacles used for transporting liquid or solid waste shall be watertight, equipped with tight-fitting lids, and shall be cleaned daily.

(4) All pumps and hose lines shall be properly maintained so as to prevent leakage.

(5) Approval in writing shall be obtained from the Administrator for every site at which the person plans to discharge the waste material collected. The approval may be given after consultation with the Guam Waterworks Authority.

(6) The hose or any similar devise used for discharging waste must be inserted into the earmarked manhole to a depth of approximately two (2) feet, to prevent any spray or spillage into the surrounding area.

(7) Every precaution must be taken to prevent any public nuisance or health hazard which may be caused by their service.

(b) Registration shall be issued to any person properly making application therefor, who is not less than twenty-one (21)

years of age, has successfully demonstrated the ability to handle the equipment, and only after the place or places and manner of disposal of the cleaning proposed by said applicant are approved by the Administrator.

(c) Registration issued pursuant to these Regulations is not transferable and shall expire December 30th of each year. A Registration may be renewed for an ensuing year by making application for renewal of the registration, upon determination of the applicant's observance of sanitary laws, ordinance, and directions. Such application shall have the effect of extending the validity of the current registration until a new registration is received or the applicant is notified by the Administrator that the renewal of the registration has been refused.

(d) All persons, who are registered to clean ~~individual~~ private sewage disposal systems, i.e., holding tank, etc., or to dispose of the wastewater there from, shall file with the Administrator a statement giving the name and the address of the owner or tenant of each and every one of the premises where an individual sewage disposal system has been cleaned by said registrant, or his employer, or by others on his behalf. The report must be submitted on a monthly basis, covering a 4 weeks period.

(e) Non-compliance with ~~of~~ the requirements of these regulations may result in the revocation or suspension of the applicant's registration. Any applicant whose registration is suspended must correct all discrepancies noted in the suspension within 30 days, otherwise his registration may be revoked.

(f) Registration under these regulations shall not be construed as impairing in any manner, the existing powers and duties of the Department of Public Health and Social Services, Guam Waterworks Authority, Guam Police Department, Department of Revenue and Taxation, and Department of Commerce under other laws.

§ ~~12118~~ 12122. Operation and Maintenance.

(a) Maintenance of ~~septic tanks and leaching fields~~ private sewage disposal systems shall be the responsibility of the owner, lessee, occupant, or person in possession of property, unless mutually agreeable arrangements are made with a private company.

(b) Owners of septic tanks shall empty and clean the tank or pit when necessary, or when ordered by the Administrator in the interest of public health, and the contents disposed of in such place and manner as shall be authorized by the Administrator.

(c) Septic Tanks should be inspected by the owner at intervals of no more than 3 years to determine the rates of scum and sludge accumulation. The inlet and outlet structures and key joints should be inspected for damage after each pump-out.

(d) The tank should be cleaned whenever:

(1) the bottom of the scum layer is within 3 inches of the bottom of the outlet device;

(2) the sludge level is within 8 in. of the bottom of the outlet device.

(e) Septic tank sludge, holding tank contents, and Temporary Toilet Sludge shall be disposed of by hauling to a sewage treatment facility. If for some unique reason disposal cannot be done at an approved facility land spreading of waste may be considered on a specific case by case basis. The specifics of each request will be evaluated separately and a permit obtained from GEPA for each separate request. Any such disposal can only take place after review and approval by the Administrator and only done under the direct supervision of GEPA staff.

(f) Grease Traps. This subsection applies to grease traps which discharge to both private sewage disposal systems and to public sewer. In order to be effective, grease traps must be operated properly and cleaned regularly to prevent the escape of appreciable quantities of grease. The frequency of cleaning at any given installation can best be determined by experience based on observation. Generally, cleaning should be done when 75% of the grease- retention capacity has been reached. At restaurants, pumping frequencies range from once a week to once every 2 or 3 months.

§ ~~12119~~ 12123. Sample Design ~~Illustration~~ Calculation (Conventional Soil Absorption System).

(a) Flow Estimate

Given:	3 BR House with washing machine and garbage grinder
	2 person per bedroom
	75 gallons per person per day
Additional:	40% of flow for washing machine
	20% of flow for garbage grinder
Flow:	3 BR x 2 person/Br x 75 gal/Person/Day
	= 450 gallons/day
Total Flow:	450 + 40% (450) + 20% (450)
	450 + 60% (450)
	450 + 270
	= 720 gallons/day

(b) Septic Tank Design - (Three Bedroom House)

V = Total flow + 50% (total flow)
(provision for detention period for treatment inside septic tank)

V = 720 + 50% (720)
= 720 + 360
= 1080 gallons
= 1080 gallons
7.48 gal/cu. ft.
= 144.3 cubic feet

Depth = 5'-0" + 1'-0" Air Space

Try Width = 4'-0"

Therefore length = $\frac{144}{5x4}$ = 7.22' say 7'-6"

Septic Tank
Dimension = 7'-6" x 4'W x 5'D

Volume = 7'-6" x 4' x 5' = 150 cu. ft.

Check: $1.5 \frac{L}{W} 2.5 \frac{L}{W}$ ration = $\frac{150}{144}$ = 1.88

Adopt Septic Tank Dimension = 7'-6" x 4'W x 6'D

(c) Absorption Area: (Three Bedroom)

Total
Flow = 720 gallons

Say percolation rate of 1" – 15 minutes

$\frac{720}{1.3}$ = 545 sq. ft.

Actual percolation rate determined by testing.

(1) Bed-type Soil Absorption System (Leaching Field):

NOTE: (Separation of Leaching Pipe shall be 6 ft on center)

Say Width = 18'-0"

Length = $\frac{545}{18}$ = 30.2 ft. say 31 feet

Therefore length of field size = 18'W x 31'L

2023 NOTE: As published by GEPA and the 1997 GAR, this provision was entitled "Appendix A – Sample Design Illustration." To avoid confusion, the reference to "Appendix A" has been omitted.

§ ~~12120~~ 12124. Penalties~~y~~.

~~(a) Any person who violates any provisions of this regulations or who refuses or neglects to comply with any lawful~~

~~order issued by the Administrator shall be guilty of misdemeanor and subject to a fine not to exceed $1,000.00. Each day of violation shall constitute a separate offense (10 GCA § 48126).~~

~~(b) Any penalty imposed pursuant to sub- section (a) of this Section shall not be bar to enforcement of this Chapter or the rules and regulations in force pursuant thereto or orders made pursuant to this Chapter by injunction or other remedy, to institute and maintain in the name of territory all such enforcement proceedings (10 GCA § 48126(b)).~~

Violations and penalties shall be as prescribed in the Toilet Facilities and Sewage Disposal Act, 10 GCA Chapter 48.

2023 NOTE: Past print publications of the GAR omitted "Any" from the start of subsection (a).

§ 12125. Fees.

(a) Application review and inspection fees are listed in Table VIII, and include: initial application review; a second review of responses to first GEPA comments, if applicable; review of occupancy certification request; review of the application for a new operating permit, if applicable; and the minimum number of inspections required to support the application, occupancy, and initial operating permit issuance process. The application review and inspection fee does not include additional application reviews after the review of responses to first GEPA comments, and does not include re-inspection due to deficiencies noted on first inspections, or re-inspection due to the work not being ready for inspection at the time of inspector arrival.

(b) Additional review fees are listed in Table VIII and apply upon the applicant's second response to a written GEPA deficiency notice, where the first response has failed to address the identified deficiencies, and to all subsequent reviews.

(c) Additional inspection fees are listed in Table VIII and apply when additional inspections are required due to deficiencies noted in writing on the first inspection, or where the work is not ready for inspection at the time of arrival of the GEPA inspector.

(d) Operating permit renewal fees are listed in Table VII and include: initial application review; a second review of responses to first GEPA comments, and occasional (spot) inspections to verify application accuracy (an inspection will not be performed for every renewal application). If additional reviews are required, additional review fees will apply as listed in subsection (b) of this Section. If an inspection is required due to potential violation of these regulations, based on GEPA

review of the renewal application documents, an additional inspection fee as listed in subsection (c) of this Section will apply.

(e) Wastewater hauler registration fees are listed in table VII and include: application review and up to one (1) inspection of hauler's pump trucks and facilities, as needed.

TABLE VIII

FEES FOR SERVICES

Service	Fee			
	Conventional soil absorption system	Holding tank	Type 4 or mound toilet facility	Other system types
1. Application review and inspection fee				
residential up to duplex	$200	$300	$300	$1,000
other building types	$500	$1,000	$1,225	$2,000
2. Additional review fee (per hour)				
residential up to duplex	$115	$160	$140	$220
other building types	$160	$180	$190	$230
3. Additional inspection fee	$65	$135	$100	$150
4. Operating permit, Initial				
residential up to duplex		$150	$150	$150
other building types		$300	$250	$500
4. Operating permit renewal				
residential up to duplex		$100	$100	$100
other building types		$150	$200	$250
5. Hauler Registration fee (per truck)		$250/$200^		

^Hauler Registration fee for first truck is $250, and $200 for each subsequent truck owned and operated by the same company.
