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DISTRICT HEALTH

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DEPARTMENT

DISTRICT BOARD OF HEALTH REGULATIONS GOVERNING  
SEWAGE, WASTEWATER, AND SANITATION

REVISION APPROVED JANUARY 26, 2006  
BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH

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RESOLUTION

**SEWAGE, WASTEWATER AND SANITATION  
REGULATIONS**

WHEREAS the Washoe County District Board of Health has been established pursuant to NRS 439.370 et seq. and vested thereby with jurisdiction over all public health matters within the geographic boundaries of Washoe County, Nevada; and

WHEREAS NRS 444.650 permits local authorities to adopt, amend and enforce reasonable rules and regulations for the sanitary protection of water and sewage disposal; and

WHEREAS the Washoe County District Board of Health deems it advisable to adopt regulations governing permits, construction, installation, operation and repair of on-site sewage disposal systems, sewage and wastewater pumping contractors, non-sewered toilet contractors and dump station operators within the Washoe County Health District and to provide for a hearing board to assist the District Board of Health in processing appeals and variance requests related thereto;

NOW, THEREFORE, BE IT RESOLVED that the Washoe County District Board of Health does hereby adopt the following regulations governing Sewage, Wastewater, and Sanitation within the Washoe County Health District.

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## **GENERAL PROVISIONS**

These regulations provided minimum requirements to be followed by any person when developing property served by an on-site sewage disposal system. On-site sewage disposal systems are considered a temporary means of sewage treatment and disposal until community sewerage is available. These requirements are primarily promulgated to prevent the spread of disease, protect the water quality of this county and ensure the on-site sewage disposal systems function properly until community sewerage is available.

### **SECTION 010**

#### **DEFINITIONS**

As used in these regulations, unless the context otherwise requires:

**010.005      AGGRIEVED PERSON**

Any person who has been adversely affected by any action taken pursuant to these regulations.

**010.010      APPROVED**

Approved in writing by the Health Authority.

**010.015      AVAILABLE PUBLIC SEWER SYSTEM**

A public sewer system located no more than 400 feet from an existing building to be served or 200 feet from the property line of an undeveloped parcel. A public sewer system is available if:

1. Adjacent property owners will grant easements across their property if necessary for connection to the sewer system.
2. The public sewer system has available capacity for the sewage generated from the parcel.
3. The person or governing body overseeing the operations of the will commit in writing to serve the parcel.

**010.020      AVAILABLE SUITABLE LAND**

The minimum land area suitable for the installation of an on-site sewage disposal system exclusive of required setbacks.

- 010.025 BEDROCK**  
A massive, continuous body of consolidated material connected by strong permanent cohesive forces and having limited filtering and treatment properties.
- 010.030 BUILDING**  
Any structure built, erected, installed and/or framed of component parts designed for the housing, shelter, enclosure, or support of persons, animals, or property of any kind.
- 010.035 BUILDING DRAIN**  
That part of the drainage system, which receives sewage, discharged from inside the walls of the building and conveys it to the building sewer beginning two (2) feet outside the building.
- 010.040 BUILDING SEWER**  
That part of the drainage system, which receives sewage discharged from the building drain and conveys it to an on-site sewage disposal system or other approved point of discharge.
- 010.045 CERTIFIED**  
To stamp with the seal of a professional registered engineer as required by Nevada Revised Statute (NRS) 625.230.
- 010.050 CESSPOOL**  
A lined or unlined excavation, which may receive direct discharges of sewage.
- 010.060 DEPTH TO GROUNDWATER TABLE**  
The vertical distance between the original ground surface and the groundwater table.
- 010.065 DISPOSAL AREA**  
That portion of the on-site sewage disposal system area, which contains the disposal trench(es), the designated repair area for the disposal trench(es) and which provides for the required trench separations and meets the required setbacks.
- 010.070 DISPOSAL TRENCH**  
That terminal portion of an on-site sewage disposal system that receives effluent from the septic tank or distribution system for final treatment, absorption, and disposal.

- 010.075 DISTRIBUTION SYSTEM**  
A watertight structure located between the septic tank and the disposal area, which receives effluent from a septic tank and distributes that effluent to the disposal trench(es).
- 010.080 DISTRICT BOARD**  
The Washoe County District Board of Health.
- 010.085 DISTRICT HEALTH OFFICER**  
The person appointed by the District Board to administer activities of the Washoe County District Health Department within the Health District pursuant to the authority of State and local health laws and regulations.
- 010.090 DUMP STATION**  
Any facility where sewage and wastewater from the tank trucks of sewage and wastewater pumping contractors, non-sewered toilet contractors, and the holding tanks of busses, trailers, recreational vehicles and other similar vehicles are legally discharged for ultimate disposal.
- 010.095 ENGINEER**  
A licensed professional engineer with practical experience in the design, installation and operation of on-site sewage disposal systems.
- 010.100 ENGINEERED FILL**  
Granular material placed upon properly prepared original ground surfaces with controlled uniform relative compaction, tested and certified by an engineer as suitable for sewage disposal.
- 010.105 ENGINEERED SYSTEM**  
An on-site sewage disposal system that are Sand Filter Bed, Engineered "T" Sand Filter or Engineered Fill Systems as described in these regulations or other type of system designed by an engineer.
- 010.110 FAILED SYSTEM**  
An on-site sewage disposal system that causes an unauthorized surface discharge of sewage or a treatment system that does not reduce the concentration of total nitrogen to below 10 ppm in the system effluent when required by Section 040.090.
- 010.115 FRACTURED BEDROCK**  
Bedrock possessing fractures, jointing, fissures or other similar physical characteristics that pose a threat to groundwater quality by having the capability of transmitting wastewater to groundwater without adequate treatment.

- 010.120 GREASE INTERCEPTOR**  
A device used to remove grease from wastewater.
- 010.125 GREYWATER**  
Liquid waste containing little or no solid materials originating from bathing and laundry facilities.
- 010.130 GROUNDWATER**  
Water below the original ground surface where the soil is completely saturated.
- 010.135 HEALTH AUTHORITY**  
The Department, the District Board of Health and their officers and agents.
- 010.140 HEALTH DISTRICT**  
The Washoe County Health District created pursuant to Chapter 439 of the Nevada Revised Statutes.
- 010.145 HOLDING TANK**  
A watertight receptacle for the temporary storage of wastewater.
- 010.150 IMPERVIOUS STRATA**  
Soil and or bedrock that limit the passage of water to slower than sixty (60) minutes per inch.
- 010.155 INDIVIDUAL ON-SITE SEWAGE DISPOSAL SYSTEM**  
Any on-site sewage collection, treatment and disposal system located on a single parcel serving only a single building.
- 010.160 MAXIMUM GROUNDWATER TABLE**  
The highest level to which the groundwater table may be expected to rise.
- 010.165 MONITORING TUBE**  
A capped and perforated pipe placed vertically in an on-site sewage disposal system or in the ground in the proximity of an on-site sewage disposal system for the purpose of monitoring variations in groundwater depths, groundwater quality or effluent depth and quality.
- 010.170 DRAINAGE CHANNEL**  
Includes canyons, swales, washes, or depressions over and/or through which storm waters sometimes flow.
- 010.175 NON-SEWERED TOILET**  
A toilet not connected to a sewer system that is portable, temporary, self-contained, fly-tight and capable of being maintained in a sanitary condition.

- 010.180 NON-SEWERED TOILET CONTRACTOR**  
Any person engaged in the operation, placement, maintenance, servicing and removal of non-sewered toilets.
- 010.185 ON-SITE SEWAGE DISPOSAL SYSTEM**  
A system for sewage collection, treatment and disposal located on the same parcel as the building being served and has the same meaning as Individual Sewage Disposal System.
- 010.190 PERCOLATION**  
The movement of water through soil or rock.
- 010.195 PERCOLATION RATE**  
The time expressed in minutes for clear water to drop one (1) inch in a percolation test hole.
- 010.200 PERCOLATION TEST**  
The procedure required by these regulations for testing soil and rock to derive the representative percolation rate for the proposed sidewall absorption area.
- 010.205 PERCOLATION TEST HOLE**  
A hole six (6) inches to eight (8) inches in diameter excavated to a minimum depth of twelve (12) inches used in the performance of a percolation test.
- 010.210 PERSON**  
A natural person, partnership, firm, corporation, or public agency. "Person" includes:
1. Any corporation which owns, leases, manages, rents, operates or possesses any real property located within the Health District; and
  2. Any officer, manager, agent or employee who is in charge of any property and who has power to give directions to other employees under his supervision.
- 010.215 PIT PRIVY**  
A toilet consisting of a pit in the earth covered with a structure (privy building) affording privacy and shelter and containing one (1) or more stools with an opening into the pit.
- 010.220 PREMISE**  
Includes any tract or parcel of land.

- 010.225 PRIVATE SEWER SYSTEM**  
Any system that is not a public sewer system.
- 010.230 PRIVATE WATER SYSTEM**  
A well and water system that is not a public water system and has from two (2) to fourteen (14) service connections.
- 010.235 PUBLIC HEALTH HAZARD**  
Any condition which may injure or endanger the safety or health of any person(s), and which may render the soil, air or water impure or unwholesome.
- 010.240 PUBLIC SEWER SYSTEM**  
A sewage collection, treatment, and disposal system serving more than one sewage source and which is owned and operated by a public entity such as, but not limited to, a general improvement district, a sanitation district, city, county or the state.
- 010.245 PUBLIC WATER SYSTEM**  
A water system, which serves at least fifteen (15) service connections or twenty-five (25) people at least sixty (60) days a year.
- 010.250 SEPTIC CONSTRAINT AREA**  
An area designated by the District Board of Health where the construction of new on-site sewage treatment systems has the potential to create a health hazard.
- 010.255 SEPTIC TANK**  
A watertight, covered receptacle designed and constructed to receive the discharge of sewage from a building sewer, separate the solids from the liquid, digest the organic matter, store digested solids through a period of detention, and allow the clarified liquids to discharge for final disposal.
- 010.260 SEWAGE**  
A combination of the liquid and water carried wastes from any building or plumbing fixture, together with such groundwater, surface water and storm water as may be present. Water carried wastes include, but are not limited to, excrement and liquid wastes from kitchens, water closets, laundries, portable toilets and holding tanks.
- 010.265 SEWAGE AND WASTEWATER PUMPING CONTRACTOR**  
A person engaged in the operation of the removal and disposal of the solid and liquid contents of septic tanks, holding tanks or other wastewater treatment or disposal facilities.

- 010.270 SOIL**  
Sediments or other unconsolidated accumulations of mineral particles which may or may not contain organic material and which have filtering properties.
- 010.275 SUITABLE SIDEWALL ABSORPTION AREA**  
That portion of a sidewall of the disposal trench located beneath the level of the perforated disposal pipe(s), which is capable of absorbing and treating the applied effluent.
- 010.280 TEST TRENCH**  
A trench excavated for the purpose of observing and/or testing subsurface soil, bedrock, groundwater or other pertinent subsurface conditions.
- 010.285 UNDEVELOPED PARCEL**  
A parcel of land not served by an on-site sewage disposal system.
- 010.290 VARIANCE**  
A written agreement issued by the District Board exempting the property owner or responsible person from specific law or regulation requirements.
- 010.295 VAULT-TOILET**  
A toilet in which waste is deposited without flushing in a permanently installed, watertight, below ground container.
- 010.300 WASTEWATER**  
Water that is discharged after use.
- 010.305 WATERCOURSE**  
A body of water, running or static, including but not limited to creeks, rivers, ponds, lakes, perennial streams, lined or unlined reservoirs, lined or unlined canals, irrigation ditches and diversions, and subdrains.

## **SECTION 020**

### **PERMITS AND LICENSES**

- 020.005** The owner, contractor and/or person constructing the on-site sewage disposal system or developing property served by an onsite sewage disposal system is responsible to ensure the construction complies with the provisions of these regulations, variance conditions, the terms and conditions of the permit or any order issued by the Health Authority. If the owner, contractor and/or the person constructing the on-site sewage disposal system or developing property served by an onsite sewage disposal system have specific knowledge of construction in violation of these

regulations they shall immediately report that information to the Health Authority.

**020.010** The owner of the property served by an on-site sewage disposal system shall obtain a on-site sewage disposal construction permit from the Health Authority prior to any construction. A contractor or the owner's agent may act on behalf of the property owner in obtaining a construction permit, but the property owner shall be ultimately responsible for obtaining the permit.

**020.015** Any remodel, additions to structures and construction of additional structures on a developed property served by an on-site sewage disposal system shall be submitted to and be approved by the Health Authority prior to construction. The remodel or construction permit applications shall comply with the applicable sections of 020.005 through 020.070. Test trenches and percolation tests are not required for these permit applications provided that the construction does not interfere with the existing on-site sewage disposal system, the area reserved for the replacement disposal field or increase the size of the on-site sewage disposal system.

**020.020** The contractor/builder of the Construction Company responsible for the construction of the on-site sewage disposal system shall have a valid Business License and a State Contractor's License before working in the Health District. Owner builders do not need a Business License and a State Contractor's License.

**020.025** A fee shall be charged for the issuance of a construction permit in accordance with the current fee schedule adopted by the District Board.

**020.030** The contractor or owner shall have a copy of the construction permit, approved plot plan, variance and/or any other special conditions on the work site at all times during construction.

**020.035** An on-site sewage disposal construction permit shall be obtained from the Health Authority to construct, alter, extend, repair, replace or abandon on-site sewage disposal system(s) and prior to any construction described in Section 020.015. The application for a construction permit shall include:

1. The name, address and current phone number of the applicant;
2. The Assessor's Parcel Number of the property which is the subject of the permit;
3. Test trench soil logs and percolations test results in compliance with Sections 080 and 090 in the sewage disposal area. Test trench soil logs and percolation test reports are not

required for construction permit applications addressed in Section 020.015;

4. Any applicable conditions imposed upon the property by the Health Authority as a result of a variance, parcel map or subdivision map; and
5. A copy of the permitted or certificated water rights or a letter of approval from the State of Nevada Department of Water Resources, if an on-site water well is to serve more than one dwelling or is to be used commercially.

**020.040**

Two copies of complete plot plans shall be submitted to the Health Authority. The plot plan shall be a minimum of 18" x 24" and a maximum of 24" x 36". The scale for properties under 10 acres shall be in the range of 1 inch = 10 feet to 1 inch = 40 feet. The scale for properties larger than 10 acres shall be in the range of 1 inch = 50 feet to 1 inch = 100 feet and shall include a detail of the residence and delineated septic system, well and/or water supply system in a scale range of 1 inch = 10 feet to 1 inch = 40 feet. The plot plan shall be drawn to scale and the following information must be included on the plot plans.

1. The information contained in Section 020.035;
2. The direction of North;
3. Vicinity map;
4. The lot dimensions and total lot area;
5. The location of roadways, easements or areas subjects to vehicular traffic, material storage or large animal habitation;
6. The location and distance to any on-site sewage disposal system within 100 feet of the subject property. If none, so indicate. This information is not required for properties served by an approved community water system;
7. The location and distance to any private well within 100 feet of the subject property and any public well within 200 of the subject property. The locations shall be shown with dimensions to the closest property lines. If none, so indicate;
8. The location of any percolation hole or test trench(es) on the property. The percolation hole or test trench locations shall be shown with dimensions to the two closest property lines. Test

trench soil logs and percolation test reports are not required for construction permit applications addressed in Section 020.011;

9. The location of all existing and proposed on-site sewage disposal system components, including a delineated area for future replacement of disposal trench(es). The location shall be established relative to the building to be served and the two closest property lines;
10. The distance to any available public sewer system within 400 feet of the property. If none, so indicate;
11. The number of bedrooms in the proposed residence. For other than single-family residence, sewage load calculations shall be submitted in accordance with sections 060.015, and 100.060;
12. The existing and proposed ground contours of the on-site sewage disposal system area shown with two (2) foot contour intervals;
13. The location of water supply lines;
14. The location of all existing and proposed structures on the property;
15. The location and layout of all existing and proposed drainage improvements;
16. The location of any watercourse and/or drainage channel on or within 100 feet of the property. If none so indicate; and
17. The boundaries of the 100 year flood plain on or within 100 feet of the property. If none so indicate.

**020.045** When a property or structure is connected to community sewer, the on-site sewage disposal system shall be abandoned as required by Sections 020.005 through 020.065 and 120.055 within 30 days of completing the connection.

**020.050** Permit applications to abandon an on-site sewage disposal system are only required to include:

1. The information contained in Section 020.035 subsections 1. and 2. above;

2. Two copies of complete plot plans shall be submitted to the Health Authority. The plot plan shall be a minimum of 18" x 24" and a maximum of 24" x 36". The scale for properties under 10 acres shall be in the range of 1 inch = 10 feet to 1inch = 40 feet. The scale for properties larger than 10 acres shall be in the range of 1 inch = 50 feet to 1 inch = 100 feet;
3. The direction of North;
4. Vicinity map;
5. The lot dimensions and total lot area;
6. The location of the septic tank with dimensions to the two closest property lines; and
7. The disposal plan required by Section 120.055, if applicable.

**020.055** A construction permit for a new on-site sewage disposal system shall only be issued in conjunction with a building permit application for the building it serves. The plot plans and related information submitted to the Distinct Health Department and the building department shall be the same. A building permit application is not required to obtain a construction permit to repair an existing on-site sewage disposal system.

**020.060** If the Sewage Disposal Construction permit application does not contain the above information, it is considered incomplete and will be rejected.

**020.065** A Sewage Disposal Construction Permit expires eighteen (18) months from the date of issue. Construction shall begin and be completed within this eighteen (18) month period. All existing approved Sewage Disposal Construction Permits on file will be valid for a period of eighteen (18) months from the effective date of these regulations.

**020.070** Once the Sewage Disposal Construction Permit has been approved, no changes or deviations to the approved plot plan shall be allowed without prior written authorization from the Health Authority.

**020.075** A Sewage Disposal Construction Permit shall be denied if the Health Authority determines that the proposed construction will not comply with these regulations or if there is an available sewer system. Construction permits are not required for the normal maintenance or the replacement of the solid lines (pipes) connecting the components of a standard on-site sewage disposal system.

- 020.080** If a public sewer system is available as defined by Section 010.015, an on-site sewage disposal system cannot be constructed, altered, reconditioned or replaced.
- 020.085** Site grading shall be done in such a manner so as surface water cannot pond in the on-site sewage disposal system area, or drain into any on-site sewage disposal system component.
- 020.090** A Sewage Disposal Construction Permit, upon final approval of the construction, becomes an operating permit and constitutes a permit to operate an on-site sewage disposal system. An operating permit remains valid until the on-site sewage disposal system fails or the property is connected to community sewer.
- 020.095** The owner of the property shall notify the Health Authority within 24 hours if the on-site sewage disposal system fails. Any surface discharge of sewage shall immediately be cleaned up and disinfected. Action to prevent a health hazard when an on-site sewage disposal system fails will be consistent with enforcement policies established by the District Board of Health.
- 020.100** For properties that are not owner-occupied, the property owner or their agent is ultimately responsible for safe operation of the on-site sewage disposal system and the safe clean up, disinfection, storage and removal of any surface discharge of sewage.
- 020.105** For properties such as but not limited to apartment complexes, mobile home or RV parks, hotel and motels that do not have a manager or responsible person on the property and available 24 hours a day to respond to sewage failures or problems shall conspicuously post a current emergency phone number. The tenants shall be provided the emergency phone number at the time of occupying the units and shall be notified of any changes of the phone number or responsible person. The responsible person shall have an approved emergency response plan to handle sewage failures, backups and problems.

## **SECTION 030**

### **INSPECTIONS**

- 030.005** Upon demand of the Health Authority representative, the owner/contractor shall provide personal photo identification, any permits, plans, and licenses, variances or other documentation pertaining to the on-site sewage disposal system.

- 030.010** Any person who obstructs, hampers, or interferes with any inspection by the Health Authority or any person who refuses entry or access to any property, premise or place where a on-site sewage disposal system is failing or is being constructed, altered, extended, repaired, replaced or abandoned, is guilty of a misdemeanor.
- 030.015** The Health Authority shall inspect the construction of on-site sewage disposal systems:
1. When excavations for the disposal trench(es) are complete and adequate filter material (drain rock, stone or gravel) is on-site; and
  2. When all system plumbing, wiring, bedding, pipe joints and installation of appurtenances are complete, but prior to backfilling of system components. Adequate filter and covering material shall be on-site at the time of the final inspection to ensure compliance with Section 100.020.
- 030.020** The Health Authority may require additional inspections. On-site sewage disposal systems required to be designed by an engineer shall be verified/certified by the design engineer prior to final approval.
- 030.025** Property corners shall be clearly marked prior to Health Authority inspection.
- 030.030** The contractor and/or person constructing the on-site sewage disposal system shall give the Health Authority at least 24 hours or one full working day, which ever is greater, notice to schedule an inspection. This may be done in person or by phone. The contractor and/or person constructing the on-site sewage disposal system shall provide the On-site Sewage Disposal Construction Permit number, system location by address and assessors parcel number, company name, licensed contractor's name and the date and time of the inspection request.
- 030.035** If the contractor and/or person constructing the on-site sewage disposal system will not be ready for inspection at the indicated time and date, the contractor and/or person constructing the on-site sewage disposal system shall, as soon as possible, notify the Health Authority of the cancellation. The Health Authority may charge a re-inspection fee each time the contractor and/or person constructing the on-site sewage disposal system makes a late notification or fails to notify the Health Authority of the cancellation and a Health Authority official has gone to the job site to perform an inspection. The Health Authority shall charge re-inspection fees for additional inspections required because of Correction Notices, Notices of Violations, or Stop Work Orders.

- 030.040** Final written approval by the Health Authority is required prior to occupancy of any building served by an on-site sewage disposal system.
- 030.045** Before leaving the sewage disposal construction site unattended, the contractor and/or person constructing the on-site sewage disposal system shall take precautions and be responsible for securing the construction site to protect human and animal safety concerns and the on-site sewage disposal system from damage.
- 030.050** The contractor and/or person constructing the on-site sewage disposal system shall make every attempt to prevent ground and surface water contamination on the work site. In the event of an accidental release of any solid waste, liquid waste, regulated substance or hazardous material, the contractor and/or person constructing the on-site sewage disposal system shall, immediately notify the Health Authority and clean-up, remove, and properly dispose of the material within the time limits set by the Health Authority. This shall be in accordance with these regulations and the Washoe County District Board of Health Regulations Governing Solid Waste Management.
- 030.055** Whenever any violation occurs to any provision of these regulations, the Health Authority may issue a Stop Work Order to the contractor and/or person constructing the on-site sewage disposal system in person or by posting it in a conspicuous place on the work site. The Stop Work Order shall specify the violations. Upon receipt of the Stop Work Order, the contractor and/or person constructing the on-site sewage disposal system shall immediately stop all construction activities. The contractor and/or person constructing the on-site sewage disposal system shall not resume construction activities until the Stop Work Order has been rescinded by an authorized agent of the Health Authority. It shall be unlawful for any person to continue construction activities, or to remove the posted Stop Work Order without prior authorization from the Health Authority.
- 030.060** After notification to the responsible person by the Health Authority of any violation to these regulations, it shall be unlawful for that person to refuse or fail to comply to correct these violations within the time limits set in that notice unless a time extension is granted by an authorized agent of the Health Authority.
- 030.065** Failure to comply with an order by the Health Authority or to correct an existing violation shall be grounds to revoke the sewage disposal construction permit and/or operating permit. Once a permit is revoked, a new permit shall be issued by the Health Authority prior to any further construction or continued use of any on-site sewage disposal system.

**SECTION 040**

**AREAS AND LOCATION REQUIREMENTS  
FOR CONSTRUCTION OF ON-SITE SEWAGE DISPOSAL SYSTEMS**

- 040.005** Lots created prior to October 19, 1972 are exempt from the lot size requirements of Section 040.015 and Table 1.
- 040.006** Lots created after October 19, 1972 and prior to March 21, 1991 with an on-site water well shall contain a minimum area of one acre (43,560 square feet) and shall comply with minimum requirements stipulated by 040.020 of these regulations.
- 040.010** Lots created prior to March 21, 1991 and served by a public water system shall contain a minimum area of one-third (1/3) acre (14,520 square feet) and shall comply with minimum requirements stipulated by 040.020 of these regulations.
- 040.015** Lots created after March 21, 1991 and before October 23, 2001, that are to be served by on-site sewage disposal systems shall be a minimum of one acre and shall comply with minimum requirements stipulated by 040.020 of these regulations.
- 040.020** Minimum lot size shall be increased to account for the average original ground slope of the disposal area according to Table 1:

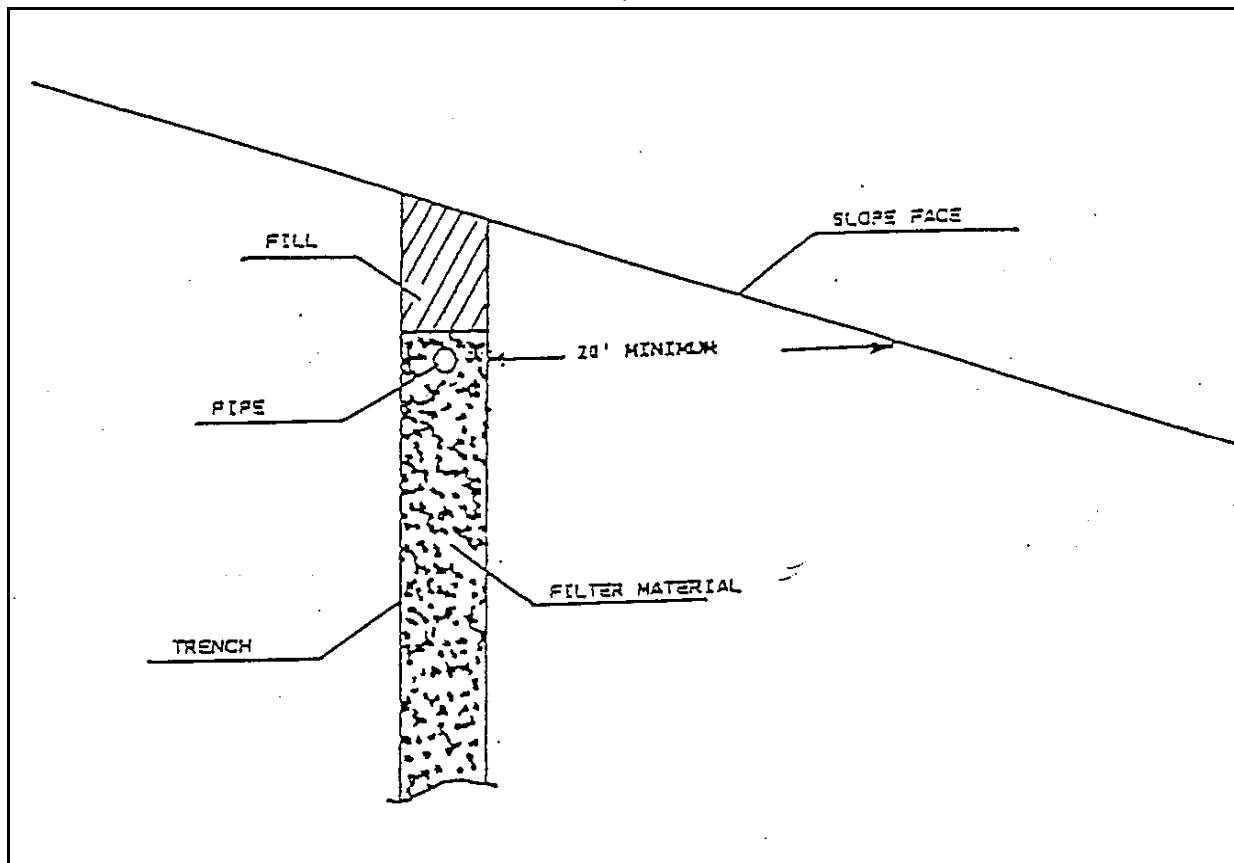
**TABLE 1  
MINIMUM LOT SIZE ACCORDING TO SLOPE OVER DISPOSAL AREA**

Average Slope of the Disposal Area	On-Site System with Well		On-Site System Community Water	
	Sq. Ft.	Acres	Sq. Ft.	Acres
Less than 5%	43,560	1.0 acre	14,520	0.33
5% or more but less than 10%	54,450	1.25 acres	18,150	0.42
10% or more but less than 20%	65,340	1.50 acres	21,780	0.50
20% or more but less than 30%	87,120	2.00 acres	29,040	0.67

- 040.025** On-site sewage disposal fields are prohibited in areas where the original ground slope is greater than 30%.
- 040.030** The minimum lot size for new subdivisions and a second or subsequent parcel map from the original parcel as it existed on October 23, 2001, proposing to use on-site sewage disposal, shall be 5 acres. The Health Authority may reduce the minimum lot size requirement to as small as one acre per lot if the applicant for division can show to the satisfaction of the Health Authority that adequate measures have been taken to ensure that the smaller lot area will not have a greater impact to the groundwater quality than the 5-acre lot size. In any case, no division shall be approved if the parcel density exceeds the standard established by the Nevada Division of Environmental Protection. Staff decisions regarding the adequacy of the proposed measures shall be approved by the Sewage Wastewater and Sanitation Hearing Board and the Board of Health through the variance procedure outlined in these regulations. Existing lots and the first four parcels created from an existing parcel shall be a minimum area of 1 acre.
- 040.035** For other than a single family dwelling, the required minimum area shall be consistent with Table 1 and shall be computed at twenty-two (22) square feet per gallon of estimated sewage. Current Uniform Plumbing Code fixture unit values shall be rated at not less than twenty-five (25) gallons per fixture unit per day. One-half (1/2) of the required area shall be reserved for sewage disposal only.
- 040.040** In all instances, the lot shall contain sufficient area for the installation of two (2) complete disposal trench systems (original plus reserve area for future replacement).
- 040.045** The disposal trench sidewall shall have a minimum horizontal set back of twenty (20) feet from the face of the finished slope, as measured at the level of the perforated disposal pipe (See Figure 1).
- 040.050** For disposal trenches located below the flow line of a watercourse, the Health Authority may reduce the minimum setback to fifty (50) feet if the applicant can prove by means of an approved monitoring program that the disposal trench will not be influenced or affected by the watercourse.
- 040.055** For disposal trenches located below the flow line of an irrigation ditch the Health Authority may reduce the minimum setback to fifty (50) feet if the ditch is intermittently used and if the ditch is not more than twelve (12) inches wide and twelve (12) inches deep.
- 040.060** The Health Authority shall determine and map septic constraint areas within the Health District. Such maps shall, by District Board of Health action,

become part of these regulations. In determining the boundaries of septic constraint areas, the Health Authority shall determine if the geologic and hydrologic conditions would be in compliance with the standards stipulated in these regulations. Legal notices for adoption of septic constraint areas shall include maps, which clearly identify the properties under consideration. Notices of proposed actions would be mailed to the owners of all properties under consideration.

**FIGURE 1**  
**SLOPE REQUIREMENTS**



- 040.065** The Health Authority shall not approve subdivisions or parcel maps, which are proposed to be served by on-site sewage disposal systems, which are proposed to be located within a septic constraint area.
- 040.070** No disposal trench may be constructed within fifty (50) feet of any area subject to flood irrigation.
- 040.075** On-site sewage disposal systems within the limits of the 100-year flood plain as delineated on the FEMA Flood Insurance Rate map series shall be designed by an engineer to function and prevent a health hazard during a 100-year flood event.

- 040.080** In areas where the Health Department staff has determined that flood waters may be present for at least three months, the septic tank and leach field shall be set back at least 100 feet from the edge of the highest water level.
- 040.085** On-site sewage disposal systems are prohibited in any area subject to vehicular traffic, large animal confinement, material storage, or any area to be paved, unless adequately protected and approved by the Health Authority.
- 040.090** On-site sewage disposal systems are prohibited under any structure or building.
- 040.095** No disposal trench(es) may be paved over or otherwise covered.
- 040.100** All on-site sewage disposal systems shall meet the requirements listed in Table 2.

**TABLE 2  
LOCATION OF ON-SITE SEWAGE DISPOSAL SYSTEM**

MINIMUM HORIZONTAL DISTANCE (IN FEET)	BUILDING SEWER	SEPTIC AND DOSING TANK	DISPOSAL TRENCH
BUILDING	--	5	2 x TRENCH DEPTH, NO LESS THAN 10 FEET (1) (2)
PROPERTY LINES AND EASEMENTS (3)	10	10	10
WELLS (private)	50	100	100
WELLS (public)	50 (4)	200	200
WATERCOURSES	50 (5)	100 (5)	100 (5)
BELOW GROUND SWIMMING POOL	5	5	10
DISPOSAL FIELDS	--	5	2 x TRENCH DEPTH, NO LESS THAN 10 FEET (1) (2)
COMMUNITY WATER LINE	10	10	25
BUILDING WATER SUPPLY LINE	10	10	10
DRAINAGE CHANNELS	25	25	25
FLOOD IRRIGATION	25	50	50

- (1) For trenches greater than 10 feet deep the minimum setback does not need to be greater than 20 feet.
- (2) Minimum of 10 feet from structures not supported by concrete foundation or slab (for example, mobile homes and above ground swimming pools). Building with basements may require greater setback.
- (3) The setback requirements from easements only apply to underground, access and roadway easements.
- (4) Public water supply wells shall be located at least 150 feet from a sewage force main.
- (5) Watercourses sealed to prevent infiltration/exfiltration of water may reduce the setback to 25 feet if approved by the health authority.

**040.105** The Health Authority shall not approve parcel maps or subdivision maps predicated upon on-site sewage disposal systems when it is evident that such sewage disposal will cause a rise in the maximum groundwater table surface to less than a minimum permitted vertical distance under these regulations.

**040.110** If a building sewer crosses a building water supply line, the building sewer shall be located at least 18 inches lower than the building water supply line as measured vertically from the exterior walls of the pipes. The building sewer shall consist of C-900 PVC, or encased in concrete until the horizontal separation exceeds 10 feet of the point of crossing. Concrete encasement shall have a minimum of 6 inches from the pipe to the outside edge of the concrete. The water supply line shall be installed in a pipe sleeve that extends until the horizontal separation exceeds 10 feet of the point of crossing.

**040.115** Where conditions warrant, the Health Authority may increase the setback distance from watercourses, drainage channels and/or groundwater.

**040.120** Septic systems on lots in areas where the nitrate concentration in groundwater has been shown to be increasing, may be required to be designed to reduce the concentration of total nitrogen to below 10 ppm in the system effluent.

## **SECTION 050**

### **SEWER LINES**

**050.005** The building sewer and leach field perforated pipe shall be ASTM F810-85 polyethylene or ASTM D2665-88 PVC or D2661-87a schedule 40 ABS.

**050.010** The size of the building sewer will be determined on the basis of the number of fixture units served. The minimum inside diameter (I.D.) shall be four (4) inches.

- 050.015** The building sewer and the solid line between the septic tank and disposal field shall be laid on a slope of not less than one-fourth (1/4) inch per foot.
- 050.020** The building sewer and other solid sewer lines shall be uniformly bedded.
- 050.025** An approved ground-level cleanout shall be installed between the building drain and the building sewer of all structures.
- 050.030** Cleanouts shall be placed in the building sewer between the structure and the septic tank, at intervals not to exceed fifty (50) feet, or where there is any change in direction of the sewer line.
- 050.035** All sewer lines and connection accessories (e.g., cleanouts) shall be rendered watertight by the use of sealing methods appropriate to the type of material used.

## **SECTION 060**

### **SEPTIC TANKS**

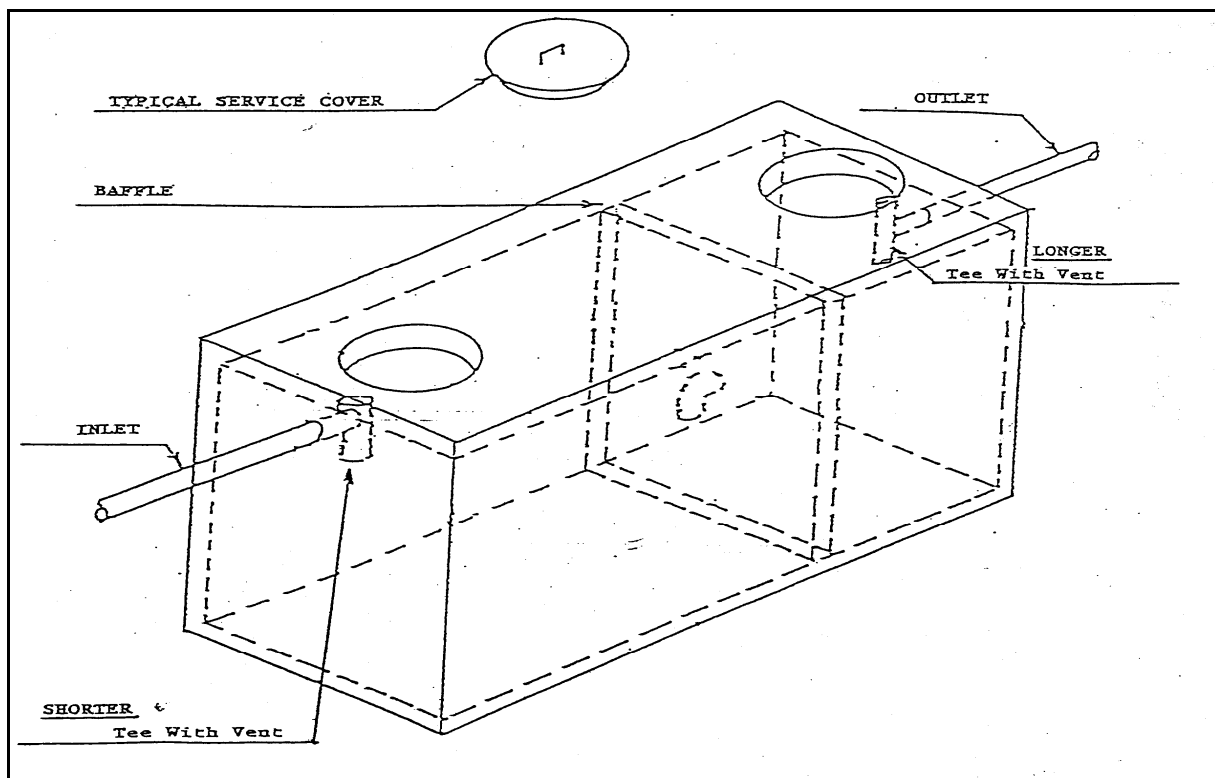
- 060.005** A minimum liquid capacity of 1,000 gallons is required for single family dwellings with up to three (3) bedrooms. For dwellings with four (4) to six (6) bedrooms, the tank capacity shall be at least 1,500 gallons. For each additional bedroom the tank capacity shall be increased at least 250 gallons.
- 060.010** Additional storage capacity equal to 20% of the liquid volume shall be provided above the liquid level in the tank.
- 060.015** Liquid capacity of septic tanks for other than single family dwellings shall be at least 1,000 gallons. The tank capacity will be calculated based upon the number of fixture units served (current U.P.C. Values) and multiplied by three (3). Each fixture unit will be rated at twenty-five (25) gallons per day.
- 060.020** Any septic tank manufactured anywhere but in its permanent location shall be legibly marked with the manufacturer's name and tank capacity.
- 060.025** Liquid depths may range from thirty (30) to sixty (60) inches.
- 060.030** A two compartment tank shall be used, and the first compartment capacity shall be at least two-thirds (2/3) of the total volume of the tank.
- 060.035** The inlet shall be fitted with either:

1. A vented sanitary tee which enters the tank at least three (3) inches above the liquid level; or
2. A baffle (See Figure 2).

**060.040** The outlet shall be fitted with either a baffle or vented tee.

**060.045** Baffles or tees shall extend a minimum of six (6) inches below the liquid level and in no case greater than 40% of the liquid depth of the tank. The tees shall be installed such that the bottoms of the tees are the same distance below the liquid level of the tank.

**FIGURE 2  
SEPTIC TANK DETAIL**



**060.050** Both inlet and outlet devices shall extend above the liquid level to within one (1) to two (2) inches of the top of the tank.

**060.055** Inlet and outlet devices shall be sealed watertight where they pass through the septic tank walls.

**060.060** Plans and design specifications for all septic tanks shall be submitted to the Health Authority for approval. Plans shall show all dimensions, reinforcing, structural calculations and other pertinent data as required.

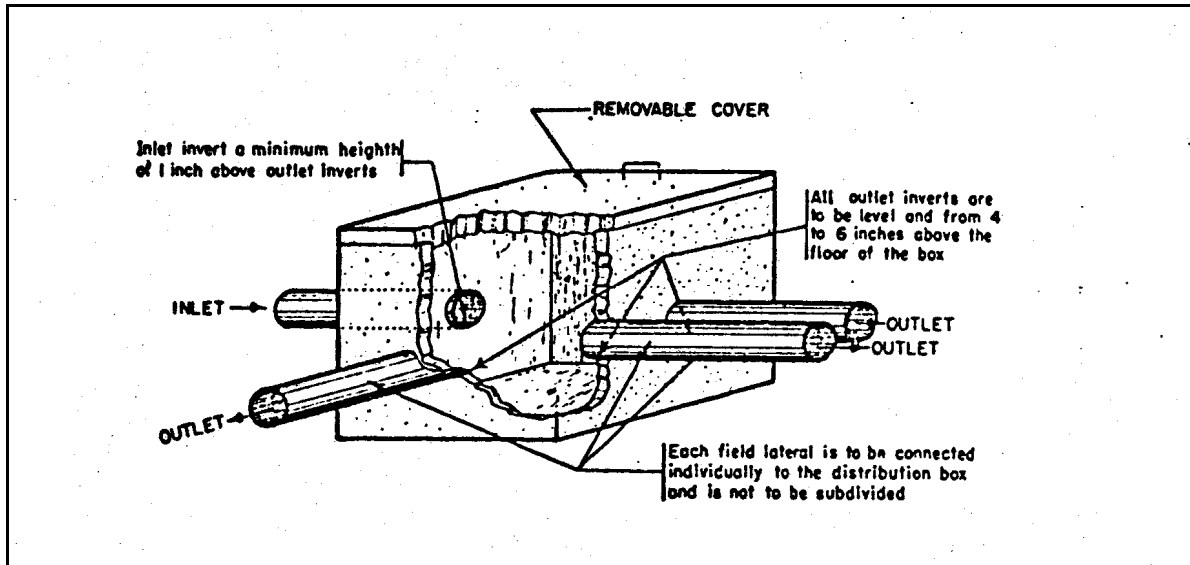
- 060.065** Septic tanks shall be constructed of approved watertight materials and approved by the Health Authority.
- 060.070** The Health Authority may require hydrostatic testing of any septic tank, distribution box, dosing tank, holding tank or wet well.
- 060.075** All commercially manufactured tanks shall be approved by the Health Authority.
- 060.080** The bottom of a built in place tank shall be a minimum of four (4) inches thick with three-eighths (3/8) inch steel rods on eighteen (18) inch centers both ways or plain poured concrete a minimum of six (6) inches thick.
- 060.085** Concrete tank walls shall be a minimum of three (3) inches thick and reinforced with three-eighths (3/8)-inch steel rod on eighteen (18) inch centers both ways. Walls without reinforcing shall be a minimum of five (5) inches thick. Welded wire mesh required is 6" X 6"/0.1 X 0.1 and supported horizontally by three-eighths (3/8) inch steel rods on twenty (20) inch centers.
- 060.090** All concrete tank tops shall be a minimum of three (3) inches thick and reinforced with three-eighths (3/8) inch steel rods on six (6) inch centers on the short span and eighteen (18) inch centers on the long span.
- 060.095** The Health Authority shall inspect the tank reinforcing steel before any concrete is poured.
- 060.100** These regulations do not preclude the use of treatment devices other than septic tanks. Such treatment devices shall be approved by the SWS Hearing Board and District Board of Health through the variance process.
- 060.105** Risers shall be required when the depth of the tank from the final grade is greater than 18 inches. A riser with a minimum internal diameter of twenty-four (24) inches shall be placed over both the inlet and outlet of the septic tank service cover. The risers shall extend to within six (6) inches of the finish grade. The risers shall be covered with a durable, removable lid or lids
- 060.110** All septic tanks shall have tight fitting, durable and undamaged lids. The use of wooden lids is prohibited.

## **SECTION 070**

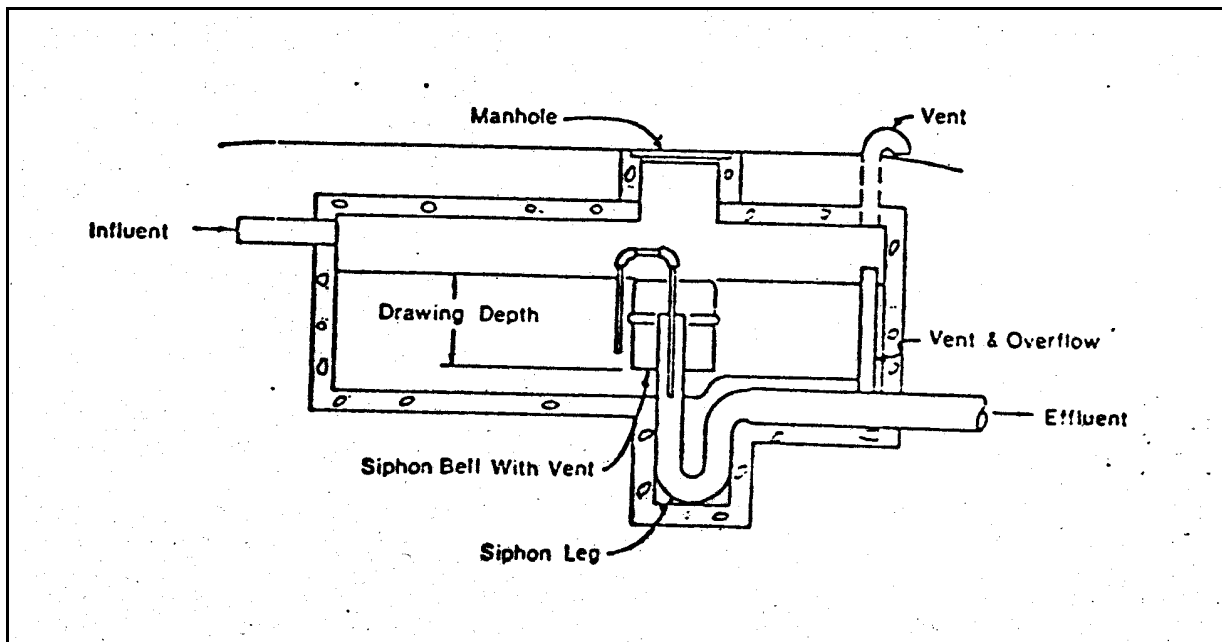
### **DISTRIBUTION SYSTEM**

- 070.005** When a distribution box is installed it shall be placed upon a compacted stable sub-grade. The box shall be level and the outlet lines shall be at the same level and at four (4) to six (6) inches above the bottom of the box. The inlet shall be at least one (1) inch above the outlet (See Figure 3).
- 070.010** Approved manifolds may be used in lieu of a distribution box. The manifold shall be level.
- 070.015** Dosing tanks shall be provided where there are over 500 lineal feet of perforated disposal pipe in the disposal trench (See Figure 4). Dosing tanks may use a siphon or pump to provide dosing. If a pump is used, an audible/visual alarm shall be installed in the building being served to indicate when the pump has failed.
- 070.020** Dosing tanks shall be capable of distributing 70% of the interior volume of the perforated disposal pipe(s) each dosing cycle. The dosing cycle shall not occur more than once every four (4) hours.
- 070.025** All dosing tank siphons shall be automatic. An alternating siphon shall be used when the length of the perforated disposal pipe exceeds 100 feet. Alternating siphons shall discharge to separate disposal trenches.
- 070.030** When dosing tanks are employed, provisions shall be made for venting the disposal trench and approved monitoring tubes shall be installed.
- 070.035** Each dosing tank shall be provided with an access opening over the siphon(s) to facilitate repair or adjustment.

**FIGURE 3  
DISTRIBUTION BOX DETAIL**



**FIGURE 4  
DOSING CHAMBER WITH SIPHON**

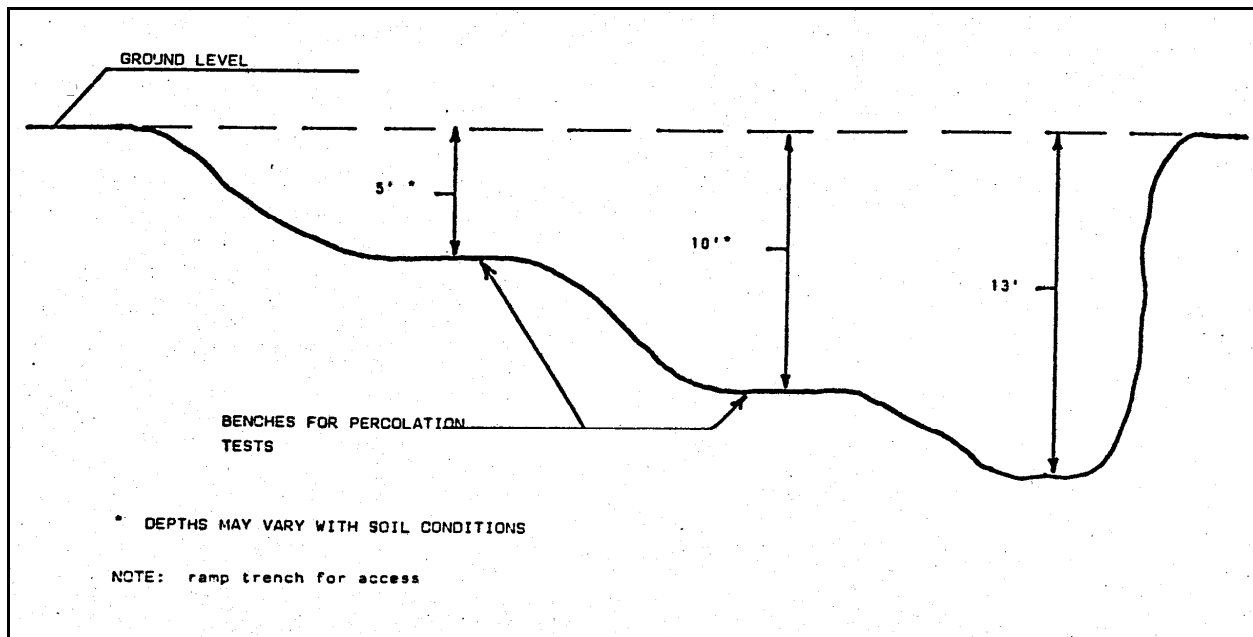


## SECTION 080

### TEST TRENCHES

**080.005** Test trenches shall comply with Figure 5 and the applicable sections of and 080.005 through 080.040.

**FIGURE 5  
TYPICAL TEST TRENCH**



**080.010** Test trenches are required for the proposed primary disposal area and for the proposed replacement disposal area.

**080.015** Where soil and groundwater conditions are known to be suitable, the Health Authority may waive the requirement for test trenches.

**080.020** Test trenches shall be excavated to a minimum depth of thirteen (13) feet unless groundwater or bedrock is encountered at a shallower depth.

**080.025** The test trench shall be a minimum of twenty-four (24) inches wide and shall be stepped and benched according to Figure 5. The stepped benches shall be constructed in such a way as to make the trench accessible for inspection and testing purposes.

**080.030** Test trenches shall be excavated at least four (4) feet deeper than the proposed disposal fields or trenches.

**080.035** All test trenches shall be inspected and evaluated by the Health Authority prior to backfill or percolation test.

**080.040** All test trenches shall be adequately secured to prevent any safety hazard and shall be properly backfilled not later than two (2) days after all required testing and inspections. Backfilling and securing of the test trench are the responsibility of the property owner, contractor and/or person constructing the on-site sewage disposal system.

## **SECTION 090**

### **PERCOLATION TEST**

**090.005** Percolation tests are required prior to the issuance of a construction permit for an on-site sewage disposal system.

**090.010** A minimum of two percolation tests shall be completed to give a representative percolation rate of the soils, which are proposed for sewage disposal.

**090.015** Additional percolation tests may be required in a test trench that exhibits confining layers or other geologic variation that may affect treatment and disposal.

**090.020** The Health Authority shall inspect all test trenches. If after review of the test trench data the Health Authority determines site characteristics are suitable for wastewater treatment and disposal, the Health Authority may waive the requirement for percolation testing.

**090.025** All percolation tests shall be performed by or under the supervision of an engineer and be verified/certified by the engineer.

**090.030** The percolation test procedure is not subject to the variance or appeal procedures of these regulations.

**090.035** The percolation hole shall be excavated into a benched portion of the test trench that is representative of the soils proposed for treatment and disposal.

**090.040** The diameter of the percolation hole shall be between six (6) to eight (8) inches and may be dug or bored to a depth of twelve (12) inches.

**090.045** The sides of the percolation hole may be scraped to expose the natural soil surface. The scrapings shall be removed from the hole.

- 090.050** Two (2) inches of one-half (1/2) to three-quarters (3/4)-inch diameter gravel shall be placed in the bottom of the percolation hole to prevent scouring.
- 090.055** Gravel-packed holes may be used as an alternate to the type of holes specified in Section 090.040 above. When gravel packed holes are used, the measured fall in the water level shall be adjusted by computations, which include the void ratio of the gravel used. These computations shall be submitted to the Health Authority.
- 090.060** The percolation hole shall be carefully and completely filled with at least twelve (12) inches of clear water. This depth of water shall be maintained for at least four (4) hours except where clay soils are present. A funnel with an attached hose or similar device may be used to prevent water from washing down the sides of the hole. Automatic siphons or float valves may be employed to automatically maintain the water level during the soaking period.
- 090.065** In sandy soils with little or no clay, soaking may not be required. If, after filling the percolation hole twice with twelve (12) inches of water, the water seeps completely away in less than ten minutes, the percolation test may proceed immediately.
- 090.070** Except for sandy soils, percolation rate measurements shall be made at least fifteen (15) hours but not more than thirty (30) hours after the soaking period began. Any soil that sloughs into the hole shall be removed and the water level adjusted to six (6) inches above the gravel (or eight (8) inches above the bottom of the hole). At no time during the test may the water level rise more than six (6) inches above the gravel.
- 090.075** Immediately after adjustment, the water level shall be measured from a fixed reference point to the nearest one-sixteenth (1/16) inch at thirty (30) minute intervals. The test shall continue until two (2) successive water level drops do not vary by more than one-sixteenth (1/16) inch. At least three (3) measurements shall be made.
- 090.080** After each measurement, the water level shall be readjusted to the six (6) inch levels. The last water level drop shall be used to calculate the percolation rates.
- 090.085** In sandy soils or soils in which the first six (6) inches of water added after the soaking period seep away in less than thirty (30) minutes, water level measurements shall be made at ten (10) minute intervals or less for a one (1) hour period. The last water level drop shall be used to calculate the percolation rate.

**090.090** The percolation rate shall be calculated for each test hole by dividing the time interval used between measurements by the magnitude of the last water level drop. This calculation results in a percolation rate in terms of minutes/per inch.

**090.095** Copies of all time and water level measurement data shall be submitted to the Health Authority along with soils logs and plot plans with accurate locations of the percolation test holes and test trenches. The locations of the percolation test holes shall be shown with dimensions to the closest two property lines. Such copies shall be certified by the engineer. Figure 6 illustrates a typical percolation test data form.

**FIGURE 6  
TYPICAL PERCOLATION TEST FORM**

PERCOLATION TEST					
Percolation Test Location		<u>APN 21-13-42</u>	Test Hole Number		<u>#1</u>
Depth of Test Hole (Inches)		<u>12"</u>	Dia. of Test Hole (Inches)		<u>8"</u>
Percolation Test By		<u>Munn</u>	Date of Test		<u>5/31/04</u>

TIME	TIME INT. MINUTES	MEASUREMENT INCHES	DROP IN WATER LEVEL INCHES	PERCOLATION RATE, MIN. PER INCH	REMARKS
10:00	—	12	—	—	
10:10	10	10 <sup>1</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>8</sub>	5.33	test hole
10:20	10	10 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	6.07	at 4' depth
10:30	10	10 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	8.0	
10:40	10	10 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	8.80	
10:50	10	11	1	10	
11:00	10	11	1	10	

Percolation Rate = 10 Minutes Per Inch.

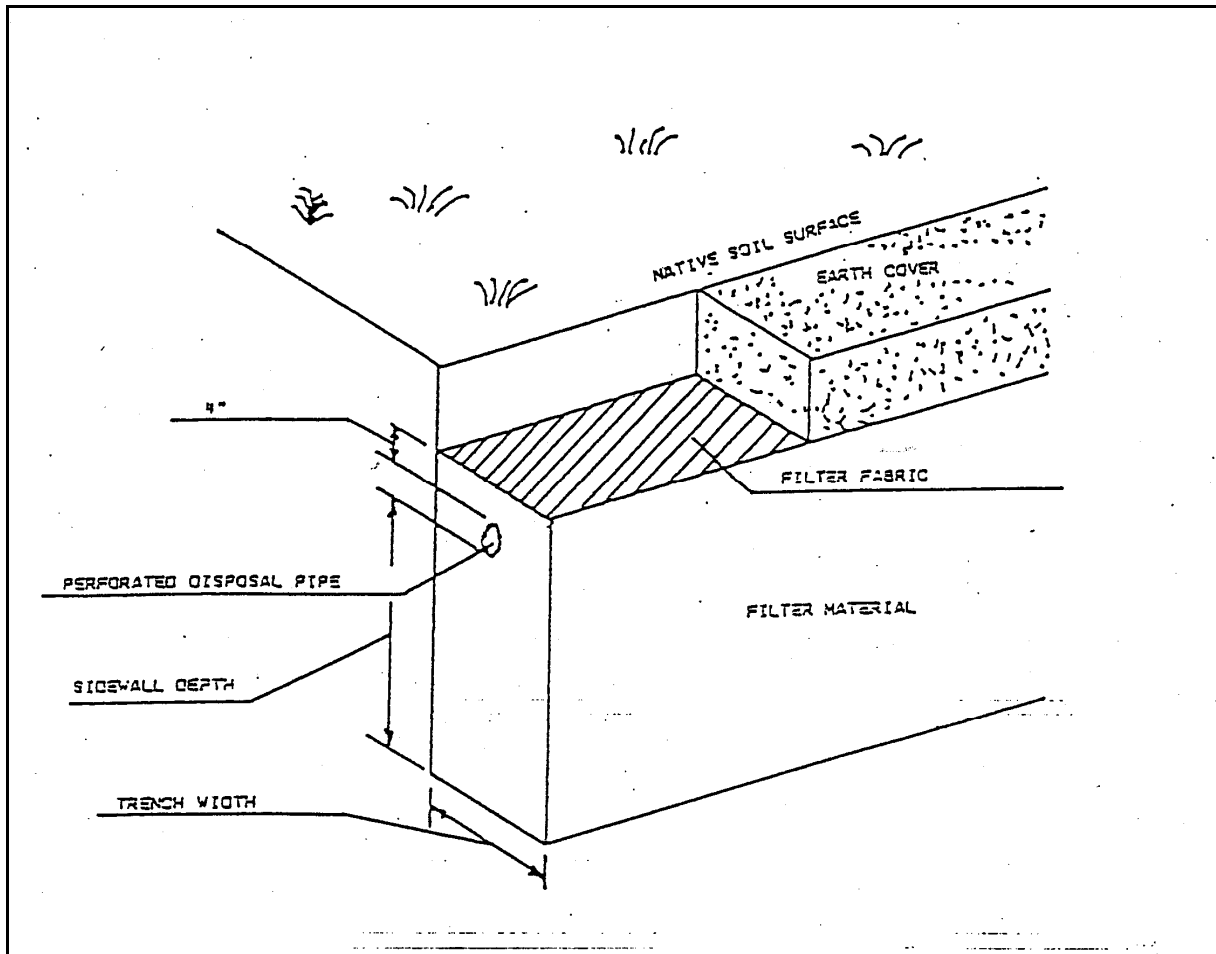
TEST PIT LOG		
DEPTH	LOG	DESCRIPTION
		0-1' top soil
2'		1'-3.5' light brown silty sand
4'		compacted silt, brown
6'		
8'	⚡	Water table

## SECTION 100

### **DISPOSAL TRENCHES**

- 100.005** The septic tank and disposal trench system shall be separated by undisturbed soil at least five (5) feet thick.
- 100.010** The bottom of disposal trenches shall be essentially level.
- 100.015** Clean stone, gravel or similar acceptable filter material shall be open graded, shall be three-quarters (3/4) inch to two and one-half (2 1/2) inches in diameter and shall be placed in the trench according to the requirements of Tables 3 and 4.
- 100.020** Perforated disposal pipe shall be placed on the filter material with the perforations down. The pipe shall be uniformly bedded and covered with a minimum of four (4) inches filter material. This material shall then be completely covered with untreated building paper or other acceptable covering materials. The covering material shall be suitable to prevent clogging of the filter material by earth backfill.
- 100.025** Standard disposal trench(es) shall be constructed:
1. In soils with percolation rates of less than sixty (60) min/inch to five (5) min/inch;
  2. With a trench depth greater than two (2) feet but not greater than ten (10) feet; and
  3. In accordance with Figure 7 and Table 3.

**FIGURE 7  
STANDARD DISPOSAL TRENCH**



**TABLE 3  
STANDARD DISPOSAL TRENCH REQUIREMENTS**

	MINIMUM	MAXIMUM
DEPTH OF TRENCH	Greater than 2' below original ground surface	10' (1)
LENGTH OF TRENCH	40'	100'
WIDTH OF TRENCH	18"	48"
GRADE OF PERFORATED DISPOSAL PIPE	2" per 100'	4" per 100'
SEPARATION OF DISPOSAL TRENCHES BASED ON TOTAL DEPTH OF TRENCHES	2 x TRENCH DEPTH, NO LESS THAN 10 FEET (2)	—
FILTER MATERIAL SIZE (open graded)	3/4"	2 1/2"
DEPTH OF FILTER MATERIAL BELOW PERFORATED DISPOSAL PIPE	18"	18'6"
DEPTH OF FILTER MATERIAL ABOVE PERFORATED DISPOSAL PIPE	4"	-----
DEPTH OF EARTH COVER OVER FILTER MATERIAL	12"	48"
PERCOLATION RATE	60 min/inch	5 min/inch (3)
SEPARATION BETWEEN TRENCH BOTTOM AND MAXIMUM SEASONAL GROUND WATER LEVEL, SATURATED SOIL, IMPERVIOUS STRATA OR BEDROCK	4'	N/A

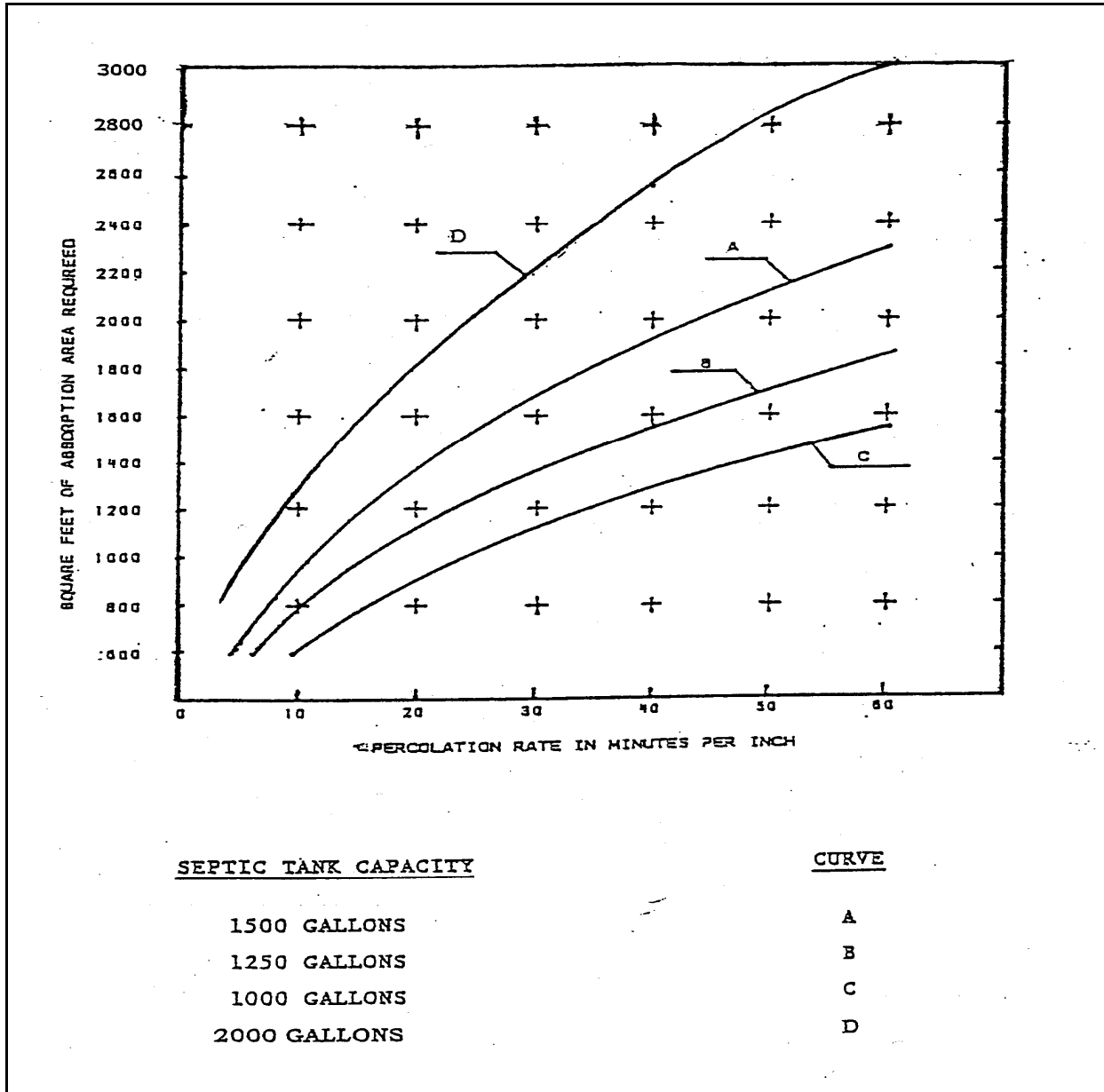
(1) Up to 20' with approval of Health Authority

(2) For trenches greater than 10 feet deep the minimum setback does not need to be greater than 20 feet.

(3) Except as allowed by Section 100.105

- 100.030** Standard disposal trench(es) may be placed in engineered fill if:
1. Constructed in soils with percolation rates of sixty (60) min/inch to twenty (20) min/inch;
  2. Sized and designed by an engineer based upon actual on-site test data. Original ground interface shall be designed to prevent slippage and to improve percolation. (Refer to Figure 2);
  3. The maximum groundwater table is at least four (4) feet below the original ground surface; and
  4. Disposal trenches may be installed in engineered fill, which is certified by an engineer and approved by the Health Authority.
- 100.040** The Health Authority may require that upon installation of a repair disposal field the owner of the property shall preserve the failed leach field and install a means of allowing the routing of septic tank effluent flow to either the repair field or the original field.
- 100.045** The minimum suitable sidewall absorption area allowed for a three bedroom single family dwelling is 600 square feet.
- 100.050** For single family dwellings the suitable sidewall absorption area shall be calculated by using the applicable capacity required by Section 060.005 and by using an application rate equal to five (5) divided by the square root of the representative percolation test rate (See Figure 8).
- 100.055** For other than single family dwellings, the suitable sidewall absorption area shall be determined on the basis of the minimum required liquid volume of the septic tank required by Section 060.015 and by using an application rate equal to five (5) divided by the square root of the representative percolation test rate (See Figure 8).

**FIGURE 8  
SIDEWALL AREA CALCULATION CURVES**



**100.060** A separation of at least four (4) feet of soil is required between the bottom of the standard disposal trench and the maximum groundwater table, bedrock or impervious strata.

**100.065** Except when a sand filter bed is to be installed, where a percolation test shows a rate faster (less than) 5 minutes per inch, the vertical setback to maximum groundwater table shall be computed by the following formula:

$$\text{Setback (ft)} = \frac{20}{(p)} \quad \text{where } p = \text{percolation rate (mpi)}$$

The vertical setback to the maximum groundwater table shall be at least 2 feet from the bottom of a sand filter bed. The maximum groundwater table depth shall be determined to the satisfaction of the Health Department staff.

**100.070** All on-site disposal fields shall incorporate a 4-inch monitoring tube in the disposal trench to permit measurement of standing water in the disposal field. The pipe shall be capped and placed so that measurement can be made from the ground surface without excavation.

**100.075** The Health Authority may approve disposal trenches using prefabricated chambers to replace drain rock upon review. Chamber systems as approved by the Health Authority shall be sized according to the sizing charts approved by the Health Authority.

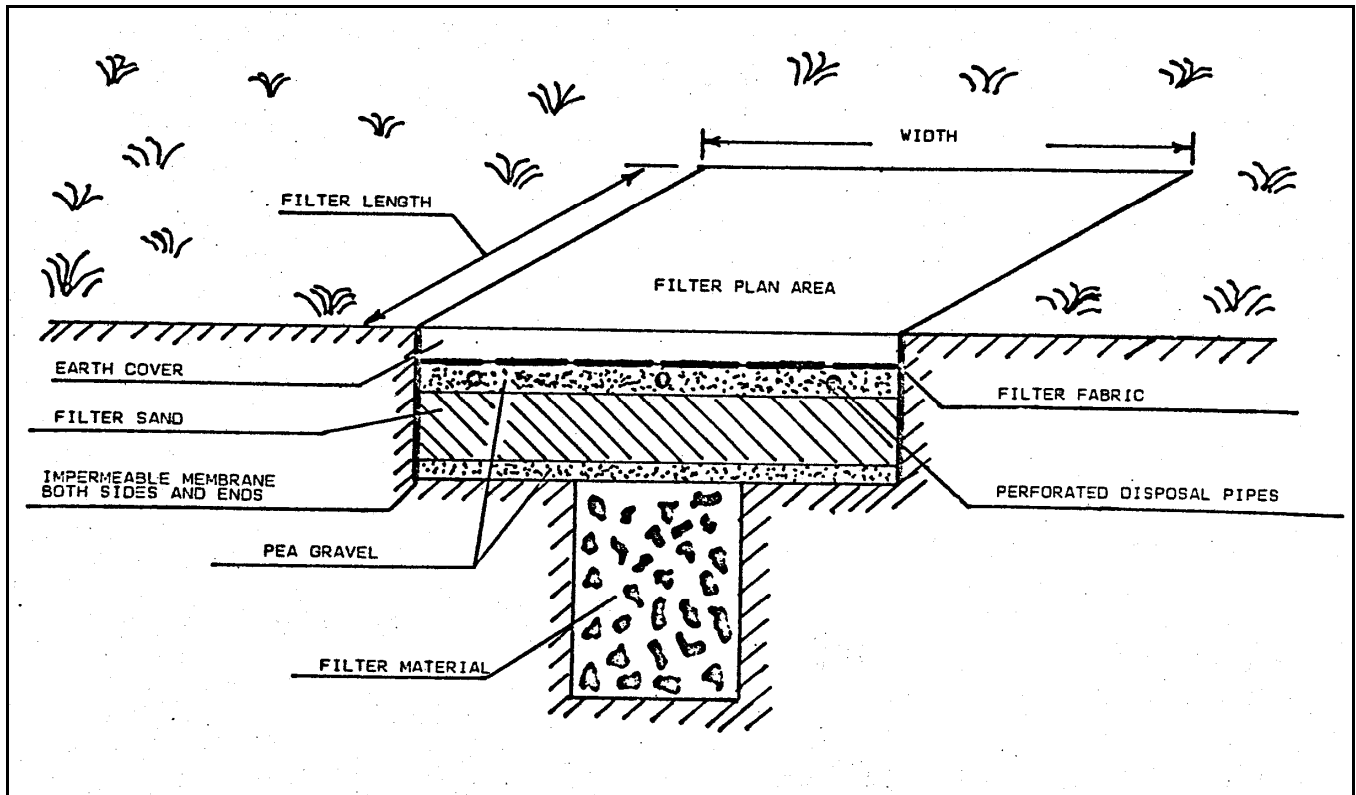
### **Engineered Sand Filter Systems**

**100.080** Engineered on-site sewage disposal systems shall be designed by an engineer in and approved by the Health Authority.

**100.085** The design engineer shall perform such inspections and test as are needed to certify that the system was constructed in compliance with the approved plans and specifications and that all materials and sand meets these regulations.

**100.090** Engineered "T" sand filter disposal trench(es) in fractured bedrock or when the percolation rate is between 60 minutes per inch and 90 minutes per inch shall be constructed in accordance with Figure 9 and Table 4 and sized and designed by an engineer based upon actual on-site test data.

**FIGURE 9**  
**ENGINEERED "T" SAND FILTER DISPOSAL TRENCH**



**TABLE 4  
ENGINEERED SAND FILTER REQUIREMENTS**

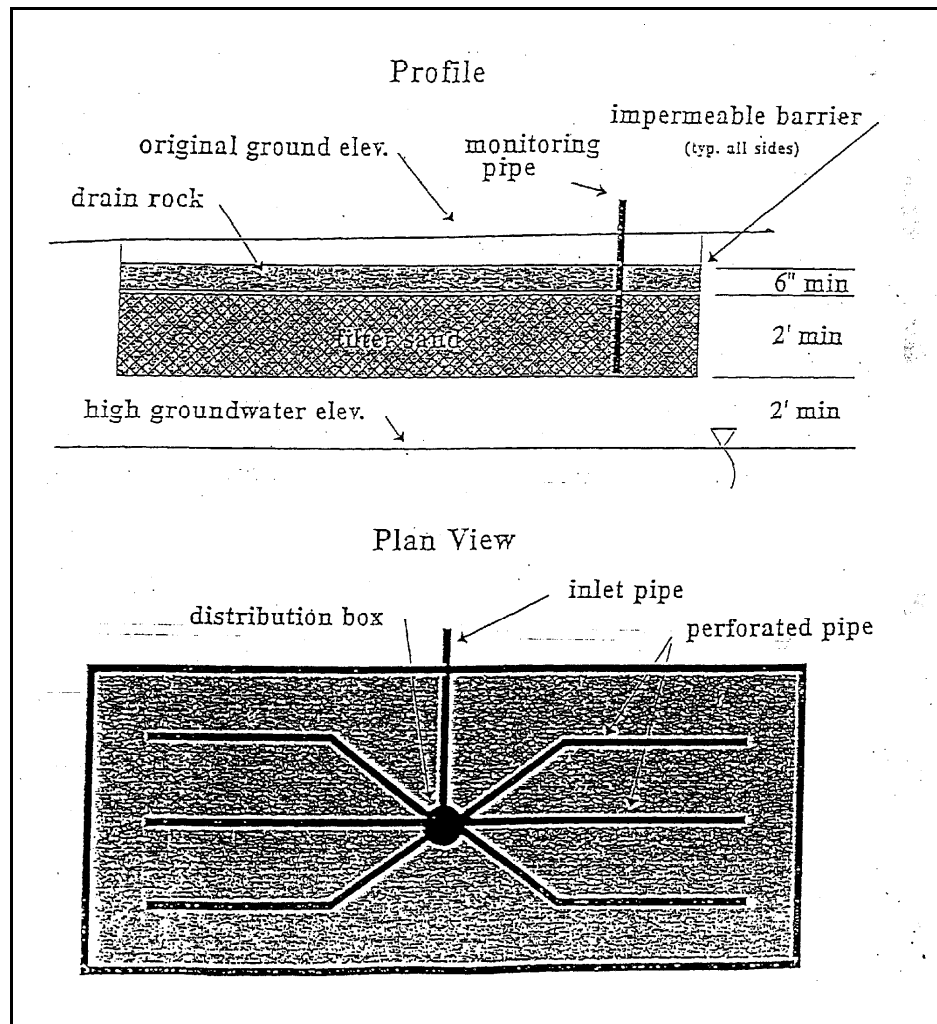
	MINIMUM	MAXIMUM
DEPTH OF TRENCH (1)	5'	20'
LENGTH OF TRENCH (1)	40'	100'
WIDTH OF TRENCH (1)	2'	24'
GRADE OF PERFORATED DISPOSAL PIPE	2" per 100'	4" per 100'
SEPARATION OF PERFORATED DISPOSAL PIPE CENTER TO CENTER	2'	5'
FILTER MATERIAL SIZE	3/4" to 1 1/2" open graded	1 1/2" to 3" open graded
DEPTH OF PEA GRAVEL BELOW PERFORATED DISPOSAL PIPE (1)	6"	N/A
DEPTH OF PEA GRAVEL ABOVE PERFORATED DISPOSAL PIPE (1)	4"	N/A
DEPTH OF EARTH COVER	12"	24"
PERCOLATION RATE	90 min/inch	5 min/inch
SIZE OF SAND FILTER MATERIAL	0.3 mm	0.6 mm
DEPTH OF SAND FILTER MATERIAL	24"	--
IMPERMEABLE MEMBRANE THICKNESS	10 mil	30 mil
DEPTH TO MAXIMUM GROUNDWATER TABLE	24"	N/A
DEPTH TO BEDROCK/IMPERVIOUS SOILS	4'	N/A
PEA GRAVEL SIZE	3/8" x 1/2"	1/2" x 1.2"
DEPTH OF PEA GRAVEL BELOW FILTER SAND (1)	6"	12"

(1) T-SAND FILTER ONLY

**100.100**

Sand filter bed disposal systems in high groundwater areas shall be constructed in accordance with Figure 10 and Table 4 and sized and designed by an engineer based upon actual on-site test data. The base of the sand filter shall be considered as "sidewall absorption area" as used in Sections 100.050 and 100.055. Sand filter beds systems are prohibited in areas where the maximum groundwater table is less than two (2) feet below the original ground surface.

**FIGURE 10  
SAND FILTER BED**



**100.105**

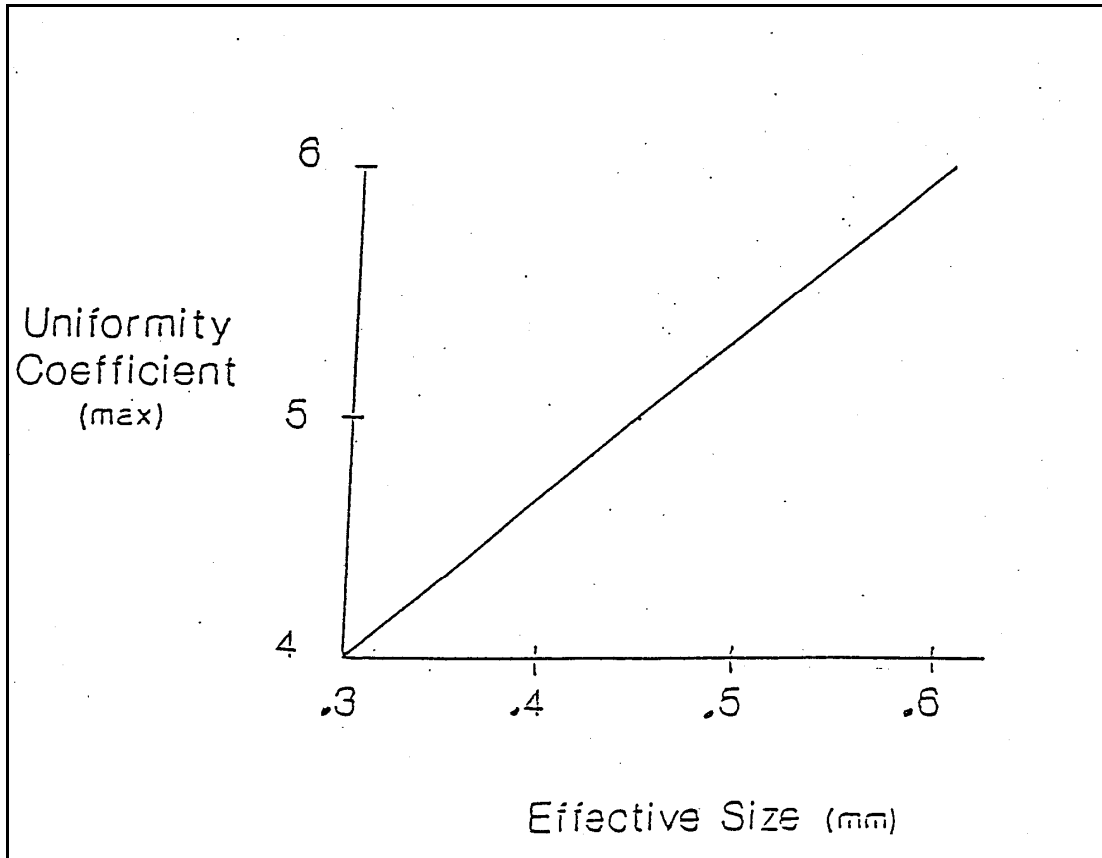
All sand filter systems shall be:

1. Constructed with sand which:

- a. Has an effective size ( $D_{10}$ ) between 0.3 (#50 sieve approximately) and 0.6 millimeters (#30 sieve approximately) with 95% passing ( $D_{95}$ ) the #4 sieve.
  - b. Has a uniformity coefficient ( $D_{60}/D_{10}$ ) in accordance with Figure 11.
  - c. Except for gradation, meets all other American Society for Testing and Materials requirements for concrete sand.
2. A sample of the actual sand proposed for use in the sand filter shall be tested by an engineering consultant or a recognized testing facility and certified as meeting the requirements of 1.a. and 1.b. above. A letter from the design engineer is required stating that the sand meets the requirements of 1.a. and 1.b. above.
3. The sand bed shall be a minimum of two (2) feet in depth.
4. The filter sand shall be settled by flooding before the pea gravel and distribution pipe are laid.
5. The maximum dosing rate for the sand filter shall be 1.33 gallons per square foot of filter plan area per day.
6. A dosing siphon or a pump shall provide intermittent dosing. Each dosing cycle shall provide a quantity of effluent equal to approximately 70% of the perforated pipe distribution line capacity. Venting shall be provided to allow proper functioning of the dosing system.
7. An impermeable membrane shall be provided between the sand filter and the adjacent earth walls. There shall be a minimum layer of plastic ten (10) millimeters thick (0.010 inch) extending from the ground surface to the bottom of the sand layer.
8. The perforated distribution line shall be placed in drain rock that extends from two (2) inches above the pipe to six (6) inches below the pipe.
9. The upper gravel layer shall be covered with a minimum of one (1) foot of mounded earth. A layer of filter fabric shall separate the earth cover and the pea gravel.

10. For single family dwellings the adsorption area for a sand filter shall be computed by dividing by three (3) the area obtained from the method described in Section 100.050.

**FIGURE 11**  
**UNIFORMITY COEFFICIENT**



**SECTION 110**

**HOLDING TANK**

- 110.005** The minimum liquid capacity of a holding tank is 1500 gallons.
- 110.010** Holding tanks shall not serve more than fourteen (14) fixture units as defined in the Uniform Plumbing Code.
- 110.015** An audible/visual alarm shall be installed in the building being served and shall be set to go off when the wastewater in the holding tank reaches 75% of its capacity.

- 110.020** Holding tanks are prohibited for residential use.
- 110.025** A holding tank shall be installed in such a manner that it will not float when empty and/or when the groundwater is at its maximum level.
- 110.030** Holding tanks shall meet septic tank specifications.

## **SECTION 120**

### **OTHER PROVISIONS**

- 120.005** All sewage, greywater and wastewater management methods not specifically authorized by these regulations shall be approved except in public health emergencies declared by the District Health Officer.
- 120.010** If any sewage and wastewater processing and disposal system governed by these regulations fails, and the failure presents a significant and continuing threat to public health, the District Health Officer may declare a public health emergency. Once declared, the District Health Officer may permit emergency sewage and wastewater processing and disposal methods not otherwise permitted by these regulations. These emergency methods may remain in use until the District Health Officer has lifted the declaration of a public health emergency.
- 120.015** The Health Authority may prohibit or curtail the use of any on-site sewage disposal system that, in the opinion of the Health Authority, is or is determined to contribute to a public health hazard.
- 120.020** No person may permit any sewage, wastewater or greywater to be deposited, discharged or disposed of in any manner not approved by the Health Authority.
- 120.025** Any surface discharge of sewage shall be immediately cleaned up and disinfected in an approved manner, and in a time frame required by the Health Authority. The property owner of the on-site sewage disposal system or his agent is ultimately responsible for the clean up of the surface discharge.
- 120.030** Cesspools are prohibited. Installation of a pit privy shall be approved.
- 120.035** Only one on-site sewage disposal system may be installed upon a one acre parcel served by an on-site water well.

- 120.040** An on-site sewage disposal system shall be located entirely upon the parcel upon which the building it serves is located.
- 120.045** The Health Authority shall not approve subdivisions or parcel maps if more than 10% of the lots do not meet, in all respects, the requirements of these regulations.
- 120.050** Prior to the abandonment of a septic tank the contents shall be completely pumped out. After inspection the tank shall be filled, with earth, gravel or other material approved and inspected by the Health Authority. The required inspections include the inspection of the septic tank after it is pumped out, after the tank is filled with earth, gravel or other material and prior to backfilling the excavation.
- 120.055** If the septic tank is going to be removed, the permit application must include a written disposal plan that describes how the tank will be removed and transported to the landfill or approved disposal site. The contents shall be completely pumped out and inspected before the tank is removed.
- 120.060** Grease interceptors may be required for all commercial food services, laundering operations and other high volume grease generators as determined by the Health Authority. The discharge from three-stage design interceptors may be routed around the septic tank. All other interceptor discharge shall be routed through the septic tank.
- 120.065** Properly functioning on-site sewage disposal systems are permitted until they fail or they are in violation of their annual operating permit conditions.
- 120.070** The design of a repair of an existing system, which fails, may be exempted from various non-obtainable portions of these regulations if the Health Authority determines that the construction and operation of the system will not adversely impact public health, safety or the environment and the construction and operation is approved by the Health Authority.
- 120.075** The construction of additional buildings to be used as living quarters as permitted by building and zoning codes may be served by an on-site sewage disposal system according to the following:
1. If the additional building is designated as a separate dwelling, an individual septic tank in addition to the one for the existing dwelling is required. This separate dwelling can have its own individual disposal field or it can use a disposal field in common with the existing dwelling as long as the combined field is sized according to the total volume of the tanks. An additional building shall be defined as a "dwelling" if it has a bathroom(s) and/or toilets, living area, and a kitchen. A

“kitchen” is defined as an area that may be used for food preparation and which may include any of the following features:

- a. A sink not associated with a bathroom.
- b. Counters or cabinets.
- c. Stubbed-in plumbing for a future kitchen.

Separate dwellings may occupy one parcel of land provided that the lot size is at least equal to the number of dwellings times the minimum lot size required by sections 040.005 through 040.020. For example, two dwellings utilizing an on-site well will require a minimum two (2) acres if located in an area where ground slope is less than 5%. The construction permit application shall conform to SWS 020.005 through 020.070, 120.035, and 120.075.

2. An additional building without a kitchen is designated as a “guest quarters” and may be served by an on-site septic system according to the following guidelines:
3. A guest quarters can connect to the septic tank and disposal field serving the main dwelling provided that the tank and disposal field is sized for the total number of bedrooms.
4. A guest quarters can have its own septic system provided that the minimum size of the septic tank is one thousand (1,000) gallons and the disposal field is sized according to the tank volume and number of bedrooms.

The addition of a guest quarters will require conformance with sections 040.005 through 040.020 for only one (1) dwelling. In the above example, if the second living area did not have a kitchen, only a one (1) acre parcel would be required.

**120.080** Discharge of waste from any water treatment device shall be considered separate from the sewage flow. The method of disposal of this waste stream shall be designed by an engineer to prevent a negative impact on the sewage treatment and disposal system and to prevent a health hazard. The Health Authority shall approve the method of disposal of this waste stream.

## **SECTION 130**

### **GREYWATER SYSTEMS**

- 130.010** Greywater systems are permitted as a supplemental means of wastewater disposal. Any greywater system shall conform with these regulations and be installed as an addition to the standard method of sewage disposal required in these regulations. No reduction in the size of the standard system as required in these regulations will be allowed due to the installation of a greywater system.
- 130.015** Construction of a Greywater system shall require an on-site sewage disposal construction permit from the Health Department. The on-site sewage disposal construction permit application and plot plan shall conform to Section 020.
- 130.020** No greywater may be applied above ground or to other exposed surfaces. Disposal of greywater shall be underground using small, shallow leach fields or other underground methods approved by the Health Department. Plants to absorb the greywater shall be a required part of the greywater system.
- 130.030** Pipes conveying greywater to underground disposal shall be buried at least six inches deep.
- 130.035** Greywater drainage systems shall be installed in compliance with all applicable requirements of the Uniform Plumbing Code. The Greywater drainage system must include the valves necessary to route the Greywater through the septic tank and disposal field and protect the system from freezing during the winter months or when not in use.
- 130.040** Perforated disposal pipe shall be at least 5 feet from a water service lines and buildings, and 25 feet from water wells and watercourses.

## **SECTION 140**

### **SEPTAGE AND WASTEWATER PUMPING CONTRACTORS**

- 140.005** Any person engaged in the operation of removing and disposing of the contents of septic tanks, holding tanks or other sewage holding treatment or disposal facilities shall obtain an annual Permit to Operate from the Health Authority.
- 140.010** A separate permit is required for each vehicle operated. The permit shall be within the vehicle at all times the vehicle is in operation.

- 140.015** A fee as set by the District Board will be collected prior to the issuance of the annual Permit to Operate.
- 140.020** An application for a permit shall specify the:
1. Area to be served.
  2. Type of waste to be hauled.
  3. Location of all discharge points.
  4. License number of each vehicle.
  5. Wastewater capacity of each vehicle.
- 140.025** Prior to issuance of the annual permit to operate, the Health Authority shall inspect each vehicle.
- 140.030** Each vehicle shall meet the following requirements:
1. The name, address and phone number of the contractor shall be on each side of the permitted vehicle.
  2. Each vehicle shall be equipped with a watertight tank and shall be maintained in a clean condition.
  3. All pumps and hose lines shall be maintained so as to prevent leakage.
  4. An approved shut-off system shall be provided for each permitted vehicle.
- 140.035** Records concerning volume of waste, the number of customers served and geographic location of customers shall be maintained by the contractor. These records shall be available for the Health Authority's review.
- 140.040** The contractor shall provide an approved area suitable for the storage and maintenance of all equipment utilized in his operations. This area shall be maintained in a neat, clean condition at all times. There shall not be public access to this area.
- 140.045** Where sewage, septage, liquid wastes and wastewaters are stored, transferred, disposed of or undergo processing, effective odor control measures shall be employed.

- 140.050** If an accidental discharge or spill occurs, the Sewage and Wastewater Pumping Contractor shall immediately clean the spilled materials, disinfect the area of the spill and report the spill incident to the Health Authority.
- 140.055** When wastewater is transferred from one vehicle (container) to another vehicle (container) it shall be done in a manner that prevents spillage.
- 140.060** Vehicles shall be constructed of easily cleanable, durable, nonabsorbent materials.
- 140.065** The drain valve shall be equipped with a cap that remains in place on the drain valve when the valve is not in use.
- 140.070** The operator shall provide an approved method or equipment for regular cleaning of the equipment.
- 140.075** Liquid waste shall not be transported in an open body vehicle unless transported in approved, portable containers.
- 140.080** All portable containers shall be watertight.
- 140.085** The discharge of any waste governed by these regulations shall be accomplished in an approved manner and at an approved location.

## **SECTION 150**

### **NON-SEWERED TOILET PERMIT REQUIREMENTS**

- 150.005** Any person operating a non-sewered toilet service shall obtain an annual Permit to Operate from the Health Authority.
- 150.010** A fee as set by the District Board will be collected prior to the issuance of the annual Permit to Operate.
- 150.015** No service may be operated without a valid Permit to Operate.
- 150.020** The Health Authority will not issue a Permit to Operate if the applicant does not meet the requirements of these regulations.
- 150.025** The Health Authority may inspect the non-sewered toilet service operation area at least annually to ensure compliance with these regulations.
- 150.030** The person operating the service shall provide an approved area suitable for the storage and maintenance of all equipment utilized in his operations. This

area shall be maintained in a neat, clean condition at all times. Public access to the area is prohibited.

**150.035** A pressurized steam cleaner, a pressurized hot water microspray or other approved equipment is required for cleaning the non-sewered toilets and ancillary equipment.

**150.040** If a dump station is utilized on site it shall comply with Section 150 of these regulations.

**150.045** At construction sites, special events, mining operations and other places where approved permanent sewage disposal facilities are not available or are inadequate, non-sewered toilets shall be provided in accordance with Table 5 or 6.

**TABLE 5  
NON-SEWERED TOILETS - EXTENDED USAGE**

TOTAL NUMBER OF WORKERS	MINIMUM NUMBER OF UNITS (8 hr. day/40 hr. week)
1 to 15	1
16 to 30	2
31 to 51	3
52 to 72	4
73 to 93	5
Over 93	1 Additional Facility For Each Additional 20 Worker

Based on one weekly service

**TABLE 6**

**NON-SEWERED TOILETS – SPECIAL EVENTS**

NUMBER OF PEOPLE	NUMBER OF HOURS FOR EVENT									
	1	2	3	4	5	6	7	8	9	10
0 – 500	2	4	4	5	6	7	9	9	10	12
1,000	4	6	8	8	9	9	11	12	13	13
2,000	5	6	9	12	14	16	18	20	23	25
3,000	6	9	12	16	20	24	26	30	34	38
4,000	8	13	16	22	25	30	35	40	45	50
5,000	12	15	20	25	31	38	44	50	56	63
6,000	12	15	23	30	38	45	53	60	68	75
7,000	12	18	26	35	44	53	61	70	79	88
8,000	12	20	30	40	50	60	70	80	90	100
10,000	15	25	38	50	63	75	88	100	113	125
12,500	18	31	47	63	78	94	109	125	141	156
15,000	20	38	56	75	94	113	131	150	169	188
17,500	22	44	66	88	109	131	153	175	197	219
20,000	25	50	75	100	125	150	175	200	225	250

**150.050** For construction sites and mining operations non-sewered toilets shall be located such that the workers shall not have to travel more than 300 feet to use the facilities.

**150.055** Sewage from non-sewered toilets may be disposed of only in an approved manner.

**150.060** When a non-sewered toilet is removed from service it shall be thoroughly cleaned by steam, pressurized hot water or other approved means prior to re-use.

**150.065** Non-sewered toilets shall not be transported when there is any material contained in the storage tank. Exception, non-sewered toilets permanently affixed to a trailer or other mobile structure where the design and intent is to transport the non-sewered toilet with materials contained in the holding tank may be approved for use.

**150.070** The person operating the service shall provide additional back-up trucks and equipment adequate to maintain the frequency of service of non-sewered toilets committed to use.

## NON-SEWERED TOILET CONSTRUCTION REQUIREMENTS

- 150.075** A non-sewered toilet shall be constructed of smooth, durable, non-absorbent, and easily cleanable materials.
- 150.080** A non-sewered toilet shall afford privacy to the user and protection from the elements and shall be designed to prevent entry of rodents and insects. All openings to the outside shall be enclosed with metal mosquito screening. The door shall be self-closing and a vent or window shall be provided for light.
- 150.085** Non-sewered toilets specially designed for use in high-rise construction may be exempted from non-attainable portions of this section with approval of the Health Authority.
- 150.090** The walls and ceiling of the structure shall be light in color and capable of withstanding repeated washing, scrubbing and cleaning.
- 150.095** The storage tank shall be enclosed within the structure, properly vented, watertight and maintained in good repair.
- 150.100** The bottom of the structure shall be designed to provide easy access to the storage tank for cleaning and maintenance.
- 150.105** The toilet seat shall be commercially manufactured, smooth, impervious, and installed so as to be easily cleaned or replaced.
- 150.110** The structure shall contain adequate space for the user with a minimum width or depth of three (3) feet, six (6) inches.
- 150.115** Urinals shall be made from durable, non-corrosive, impervious material. Urinals shall be designed to minimize splashing and shall be finished with smooth surfaces and proper slopes so that they may be easily cleaned and readily drained.
- 150.120** A closed device for holding toilet paper shall be provided.
- 150.125** Toilet paper shall be available at all times.
- 150.130** The structure shall be clearly and legibly marked with the name and telephone number of the service.
- 150.135** The interior of the structure and the tank shall be cleaned at least once every seven (7) days while the toilet is in use or more frequently as needed to maintain the structure in a clean, odor-free condition.

**150.140** If the frequency of the cleaning schedule is increased, the Health Authority may reduce the number of non-sewered toilets required by Table 5 or 6.

**150.145** After cleaning, the tank shall be filled with a solution, which effectively controls odors.

## **SECTION 160**

### **DUMP STATIONS PERMIT REQUIREMENTS**

**160.005** Any person operating a dump station shall obtain an annual Permit to Operate from the Health Authority.

**160.010** A fee as set by the District Board will be collected prior to the issuance of the annual Permit to Operate.

**160.015** An application for a permit shall specify the:

1. Area to be served;
2. Type of waste to be accepted;
3. Location of all discharge points; and
4. Written approval of the treatment plant operator receiving such wastes.

**160.020** No dump station may be operated without a valid Permit to Operate.

**160.025** The Health Authority will not issue a Permit to Operate if the applicant does not meet the requirements of these regulations.

**160.030** The Health Authority may inspect the dump station operation area at least annually to ensure compliance with these regulations.

**160.035** The operator shall provide an approved area suitable for the storage and maintenance of all equipment used in the operations.

**160.040** The dump station shall be equipped with a watertight cover. The cover shall remain in place on the drain opening when the opening is not in use.

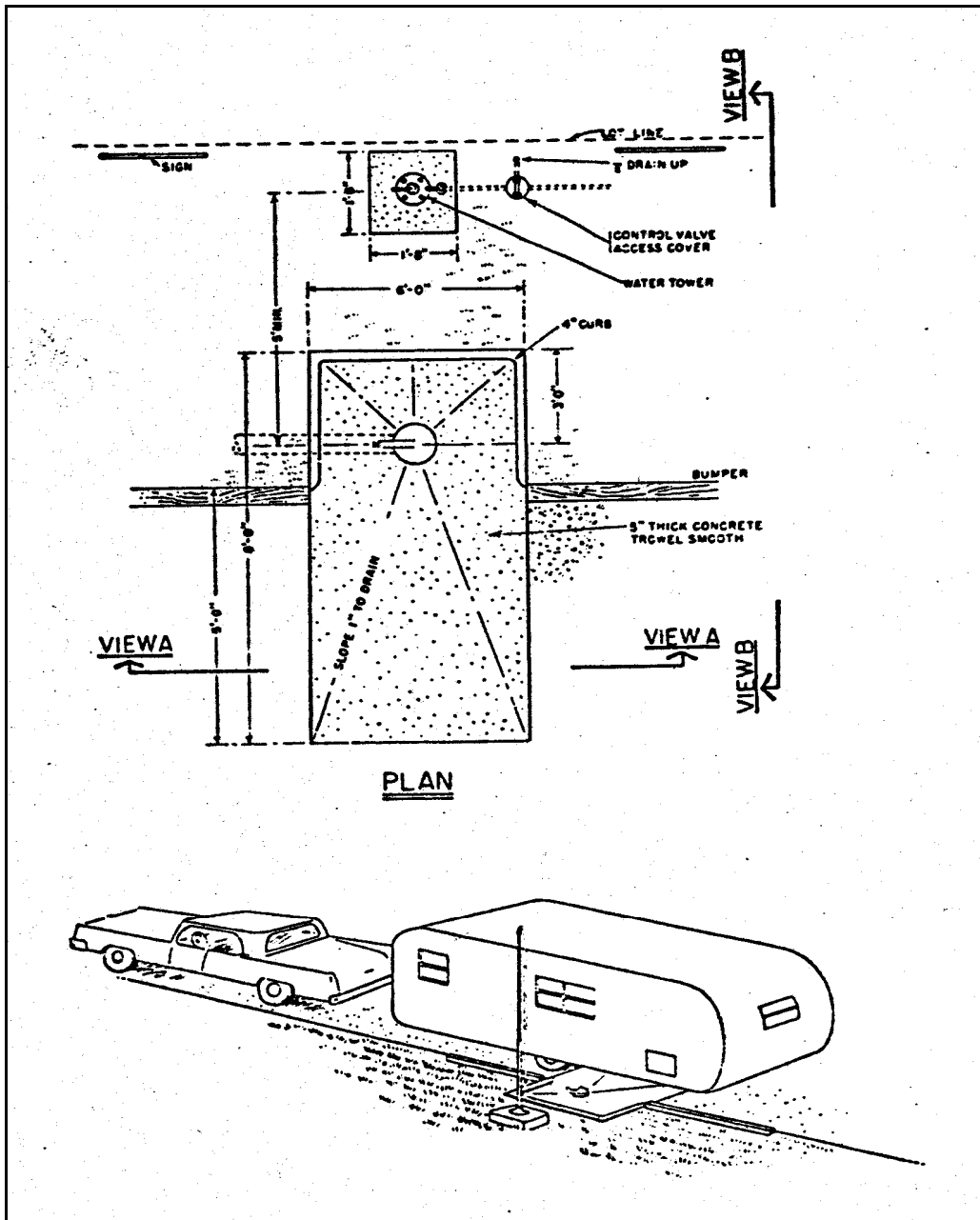
**160.045** The operator shall provide for regular, approved cleaning of the dump station.

- 160.050** Waste governed by this Section shall be discharged in an approved manner and at an approved location.
- 160.055** Effective odor control measures shall be employed at the disposal site.
- 160.060** If an accidental discharge or spill occurs, the operator shall immediately clean the spilled materials, disinfect the area of the spill and report the spill incident to the Health Authority.
- 160.065** All discharges into the dump station drain shall be accomplished through a dump hose unless the operator has received prior approval for another discharge method.
- 160.070** All plans for the construction of a dump station shall be submitted to the Health Authority for review, comment, change and/or approval prior to the start of construction.

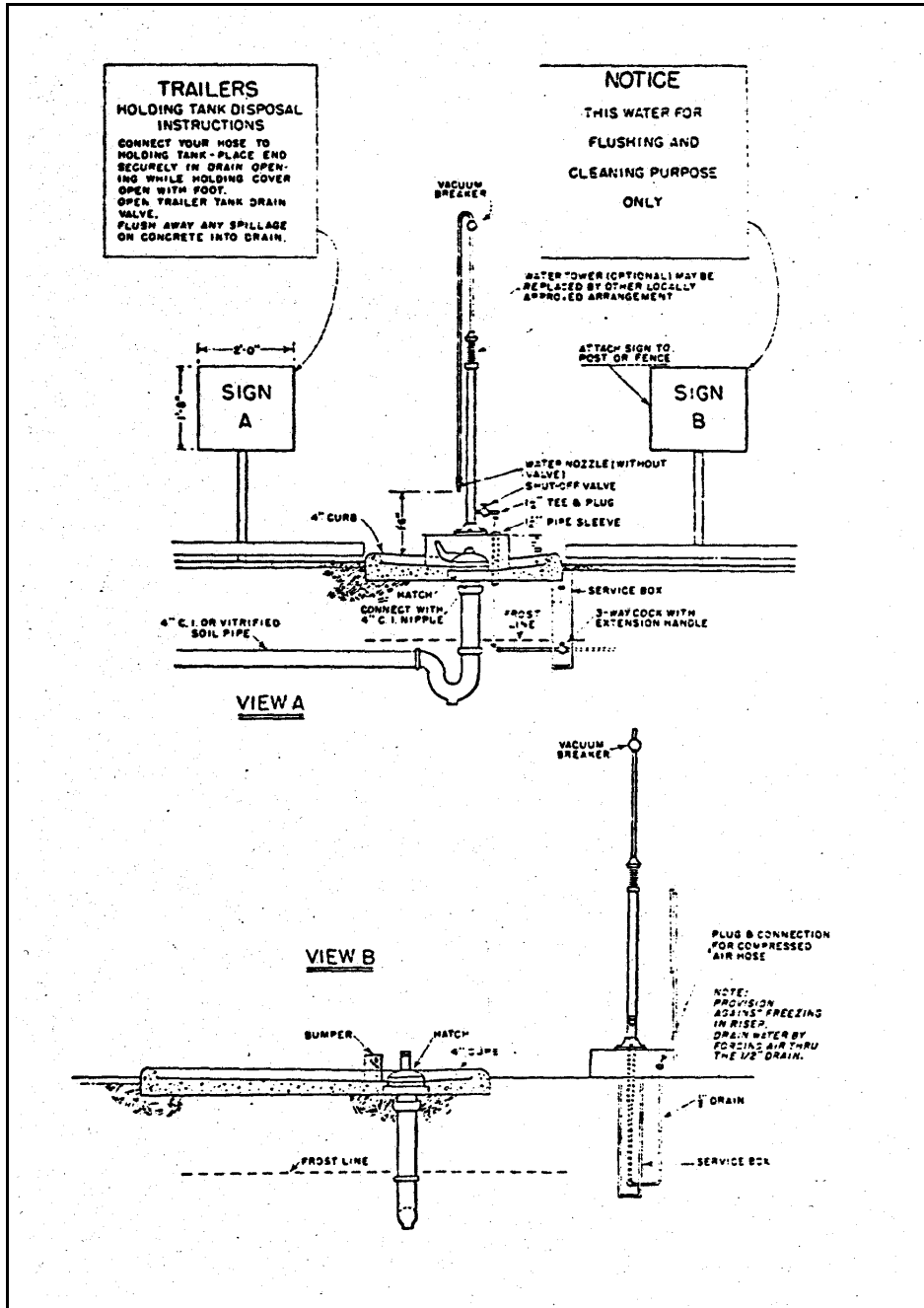
#### **DUMP STATIONS CONSTRUCTION REQUIREMENTS**

- 160.075** All plumbing shall be done in accordance with the Uniform Plumbing Code that is current at the time construction occurs.
- 160.080** The dump station shall have wash down water on site. This wash down water service shall be equipped with an approved vacuum breaker or anti-siphon device.
- 160.085** The dump station area shall be posted with approved information signs.
- 160.090** The operator is responsible for maintaining the dump station in a clean, odor free condition.
- 160.095** The dump station construction shall conform to Figures 12 and 13.

FIGURE 12  
TYPICAL DUMP STATION



# FIGURE 13 DUMP STATION DETAILS



## **SECTION 170**

### **VARIANCE**

**170.005** Sewage Wastewater and Sanitation Hearing Board; creation, composition, duties. Appeals and Variances.

**170.010** The Sewage, Wastewater and Sanitation Hearing Board (hereafter referred to as the Board) consisting of five (5) members and two (2) alternates appointed by the District Board is hereby created.

**170.015** Qualifications of members:

1. One member of the Board shall be an attorney admitted to practice law in this state.
2. One member of the Board shall be an engineer registered in this state.
3. One member of the Board shall be a person who is not an employee of the Health Authority and:
  - a. Has at least two (2) years of experience in sanitary engineering or public health sanitation; or
  - b. Is knowledgeable in the construction and operation of on-site sewage disposal systems.
4. The members of the Board and alternates shall be residents of the Health District.

**170.020** Terms of members, vacancies:

1. Members of the Board and alternates shall be appointed for a three (3) year term.
2. Upon the expiration of his term of office, a member may continue to serve until his successor is appointed.
3. If a vacancy occurs in the Board, the Health Officer shall notify the District Board and the District Board will appoint a person duly qualified pursuant to Section 170.015 to replace the member for the remainder of the unexpired term.

**170.025** Officers of the Board:

1. The Board shall elect from its members a chairman and such other officers, as it deems necessary. The officers of the board shall hold their respective offices at the Board's pleasure.
2. Subject to the approval of the District Board, the Board may adopt a manual of procedure to govern its conduct.

**170.030** Meetings of Board, Quorum:

1. Except as provided in subsection 2, the Board shall meet at least once a month.
2. The Board may meet at intervals less or more frequent than those specified in Subsection A when no matters are pending for a regularly scheduled meeting.
3. Three (3) Board members or alternates constitute a quorum.
4. The Board shall not take action on any matter before it except by concurring vote of the majority of the quorum.

**170.035** Powers and duties of Board:

The Board shall hold hearings to consider:

1. Appeals by aggrieved person,
2. Applications for variances, and
3. Petitions to consider other matters relating to sewage, wastewater or sanitation.

The Board may also formulate recommendations for action by the District Board.

**170.040** Appeal or petition to Board.

1. To appeal any final decision of the Health Authority, a person shall, within ten (10) days of the decision, file a written notice of appeal at the office of the Director of the Division of Environmental Health Services of the Department. The notice shall be filed on a form prepared by the Health Authority and approved by the Board.

2. To petition the Board to consider any matter relating to sewage, wastewater or sanitation, except a request for a variance, a person shall file a written request with the chairman of the Board or his designee.
3. Within thirty (30) days after an appeal is filed pursuant to subsection 1, or a written request is filed pursuant to subsection 2, the Board shall conduct a hearing on the appeal or request.
4. At the hearing:
  - a. The Chairman or Vice-Chairman of the Board may administer oaths to all persons who wish to testify.
  - b. The Board shall receive all relevant evidence relating to the appeal or petition.
  - c. Members of the board may question any person testifying before them.
5. At the close of the hearing, the Board shall make its decision and recommendation for final action by the District Board. The transcript of the hearing and recommendation shall be submitted to the District Board within thirty (30) days of the hearing.
6. The District Board, upon receipt of the transcript and recommendation, will make a final decision on the appeal or request at its next regular meeting. In making its decision, the District Board may affirm, modify or reverse the decision of the Board or refer the appeal or request back to the Board for additional consideration.
7. If the appeal or petition is referred back to the Board, the Board shall, within thirty (30) days, rehear the appeal or request and the procedures set forth in subsections 5 and 6 of this section will apply. The District Board may make not more than one (1) referral back to the Board.

**170.045** Application for Variance

1. Any person who applies for a variance shall pay a non-refundable fee as set by the District Board.

2. To request a variance, a person shall file a completed variance application sheet at the office of the Director of the Division of Environmental Health Services. The application shall specify all the sections of these regulations for which the person seeks a variance. The application shall include:
  - a. Soil logs and percolation test results.
  - b. Sewage loading calculations and application rates.
  - c. System sizing calculations.
  - d. Pertinent geological and hydrogeological information.
  - e. Construction drawings cross-sections and specifications.
  - f. A contour map accurately showing test hole locations and the information required under Section 020.035 of these regulations.
  - g. Such other information as the Director may require enabling the Board to consider adequately the application.
  - h. Certification by an engineer that the proposed system is properly designed to function for at least ten (10) years.
  - i. An application will not be considered complete until all information specified in this section and the Division has received the required fees.
3. Upon receipt of the completed application, the Director will forward it to the chairman of the Board.
4. Within forty (40) days of the date on which an application for a variance is filed, the Board shall conduct a hearing to consider the variance request.
5. Prior to the hearing, the Director shall cause notice of the application to be posted in accordance with the provisions of Chapter 241 of the Nevada Revised Statutes.
6. At the hearing, the board shall receive all relevant evidence and shall consider whether:

- a. The proposed system will significantly and/or adversely impact any water so that the water may no longer be used for its existing or expected beneficial use.
  - b. The proposed system will be detrimental or pose a danger to public health or safety or create or contribute to a public health hazard.
  - c. Other reasonable alternatives for compliance with these regulations are available to the applicant.
7. In determining whether to recommend approval of the variance, the Board shall consider the relative interests of the public, other owners of property likely to be affected by the variance and the applicant.
8. At the close of the hearing, the Board shall make its decision and written recommendation for final action by the District Board. The Board may recommend that appropriate conditions are placed upon the variance and failure to comply with those conditions shall result in immediate revocation of the variance.
9. The decision and written recommendations of the Board, together with any written findings, the evidence received at the hearing and the application shall be forwarded to the chairman of the District Board within thirty (30) days after the hearing.
10. The District Board, upon receipt of the recommendation specified in Subsection 8, will make a final decision. The District Board may receive additional evidence and testimony from any person and may affirm, modify or reverse the decision of the Board or refer the application back to the Board for additional consideration. The basis for the decision of the District Board and any conditions imposed will be specified in writing and sent to the applicant.
11. If the variance request is approved, the applicant shall immediately proceed to construct or implement the variance, which is the subject of the application. The variance expires one (1) year from the date on which it was approved unless the on-site sewage disposal system construction has commenced within that period of time, or as otherwise

specified in the variance. A variance may be renewed by following the procedures listed in Subsections A through I.

12. If the application is referred back to the Board, the Board will rehear the matter in the manner specified in subsection 4. The District Board may make not more than one referral back to the Board.

## **SECTION 190**

### **UNLAWFUL ACTS: PENALTIES**

- 190.005** Any person who violates any provision of these regulations is guilty of a misdemeanor.
- 190.010** Each day or part of a day during which such violation is continued and/or repeated constitutes a separate violation

## **SECTION 200**

### **CIRCUMVENTION AND INTERPRETATION**

- 200.005** Nothing contained herein shall be interpreted to circumvent these regulations to make them less effective.
- 200.010** If more than one (1) interpretation exists for a regulation, the more restrictive interpretation shall be followed.

## **SECTION 210**

### **SEVERABILITY**

- 210.005** If any provision of these regulations is held invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the other provisions, which can be given effect without the invalid provision, and to this end the provisions of these regulations are declared to be severable.