



FACTSHEET NEW MEXICAN LIQUID WASTE AND SEPTIC TANKS

Introduction:

This is a fact sheet intended to help with the understanding of liquid waste and septic tank regulations that exist in New Mexico.

New Mexican Land Use Regulations regulate land use within the state of New Mexico

The Taos County Land Use Regulations regulate development and land use within the jurisdiction of Taos County, the boundaries of the county being defined in NMSA 1978, 4-29-1.

Liquid Waste and Septic Tanks

(For Properties with Flows under 2,000 gallons per day)

Permits:

- Any person in the State of New Mexico who does not have access to a community sewer system must obtain a Liquid Waste Permit issued by the New Mexico Environment Department before building or transporting a home onto a property.

- A permit is also required for any modification to the system or property i.e. change the disposal method, change the design flow, replace part or all of the system, or change the lot size of the property.

- A permit can be obtained by completing the application form and providing NMED with the following items: floor plans, recorded warranty deed, Uniform Property Code, and a soil analysis.

- A test hole may also be required if you are building in an area where it is suspected that a high water table or bedrock problems exist.

- Permits may be cancelled by the Department if the system is not completed within one year or it is found that information provided in the application is false or inaccurate.
- All installations must be performed by a licensed contractor i.e. MM1, MM-98, MS1, MS3.

- A homeowner can also do the installation provided he/she completes the homeowner training and passes a homeowners test.

- All installations must receive a final inspection by the Department before it is activated.

- Any unpermitted existing systems must apply for a Certificate of Registration from the Department.

Lot Size Requirements:

(The lot size requirements apply to conventional systems that discharge to the soil.)

-A conventional system shall not be installed on a lot less than 0.75 acres where there is not an established on site disposal system, except as provided under Section 301.F.

-The design flow for a conventional disposal system shall not exceed 500 gallons per acre. Lot size X 500 = design flow allowed for that piece of property. For lots that exceed 500 gallons per acre or lots that do not meet minimum lot size, advanced/alternative systems that reduce Total Nitrogen (TN) per Section 603 may be approved.

-Two residences can discharge into one liquid waste system provided lot size requirements are met and the system is designed accordingly. Well splits must be registered with the State Engineers Office (827-6120).

-Liquid waste shall be disposed of on the same piece of property on which it is generated unless a perpetual easement is properly recorded with the county.

Design Flow: The design flow established for residential homes is as follows:

1 bedroom = 150 gallons per day

2 bedroom = 300 gallons per day

3 bedroom = 375 gallons per day

4 bedroom = 440 gallons per day

5 bedroom = 500 gallons per day

*Add 50 for each additional bedroom

-Any room within a building that is designated as a sleeping room on drawings submitted to the responsible building permitting authority or to the department will be considered a bedroom and calculated into the design flow.

- Bathrooms are not calculated into the design flow.

-For multiple units on a property such as a duplex or guest house, the flow for each home must be added together to determine the total flow.

-Rental spaces for mobile homes will be calculated as three bedrooms.

Setback Requirements: Setback distances apply to any part of the on-site liquid waste system and its designated replacement area:

From: To:	Building Sewer	Treatment Unit*	Disposal Field	Seepage Pit
Property lines	clear	5 ft.	5 ft.	8 ft.
Building or structure	2 ft.	5 ft.	8 ft.	8 ft.
Distribution box	--	--	5 ft.	5 ft.
Disposal field	--	10 ft.*****	4 ft*****	10 ft.
Seepage pit	--	5 ft.	5 ft.	12 ft.
Drinking water line*****				
- private	1 ft.	10 ft.	10 ft.	10 ft.
- public	10 ft.	10 ft.	10 ft.	10 ft.
Drinking Water Source/Well:				
- Private	50 ft.	50 ft.	100 ft.	100 ft.
- Public	50 ft.	100 ft.	200 ft.	200 ft.
Irrigation well	50 ft.	50 ft.	100 ft.	100 ft.
Lined canals	--	10 ft.**	10 ft.**	10 ft.**
Unlined canals, drainage ditches	--	15 ft.**	25 ft.**	25 ft.**
Arroyos	--	15 ft.**	25 ft.**	25 ft.**
Other watercourses				
Waters of the State	--	50 ft.	100 ft.	100 ft.

Retention/detention area	--	15 ft.	15 ft.	15 ft.
Seasonal high water table, bedrock and other impervious layers***	--	--	4 ft. to bottom of system	4 ft. to bottom of system

(1) * Applies to privy pits, enclosed systems, other liquid waste treatment units.

(2) ** Plus depth of channel.

(3) *** Unlined privy pits shall provide clearance of at least 4 feet.

(4) **** Plus 2 feet for each additional foot of depth below the invert of the distribution pipe.

(5) ***** May be 5 feet when Schedule 40 PVC/DWV pipe is used.

(6) *****Or applicable plumbing code.

Building Sewer - That part of the horizontal piping of a drainage system which extends beyond the ends of the building drain and receives the discharge of the building drain and conveys it to a public sewer, private sewer, individual sewage disposal system, or other point of disposal.

Treatment Unit - Applies to privy pits, enclosed systems, other liquid waste treatment units.

Disposal Field - also called leach fields or leach drains, are subsurface wastewater disposal facilities used to remove contaminants and impurities from the liquid that emerges after anaerobic digestion in a septic tank.

Seepage Pit - a pit that is lined with a porous, mortarless masonry wall in which effluent from a septic tank is collected for gradual seepage into the ground, sometimes used as a substitute for a drainfield.

Clearance Requirements

4 feet of suitable soil is required between the bottom of an absorption area and high water table or bedrock. A reduction in this clearance may be allowed with appropriate advanced treatment or alternative disposal such as a mound system. Holding tanks (no discharge) may be allowed in these circumstances.

Mound System - is an engineered drain field used in areas where septic systems are more prone to failure due to having extremely permeable or impermeable soils, soil with shallow cover over porous bedrock, and soils that have a high seasonal water table.

Treatment Units

Applies to privy pits, enclosed systems, other liquid waste treatment units.

-Conventional treatment units must be certified by the NMED for use.

-All tanks shall be watertight. (Tanks installed after 1976 must have a baffle.)

- All manholes on new installations or modifications must have risers to grade with secure lids and a handle.

A secure lid shall consist of the following:

- A padlock
- A twist lock cover requiring special tools for removal
- A cover weighing 58 pounds or more, and
- a hinge and hasp mechanism or other mechanism approved by NMED.

-All new installations and modifications require an approved effluent filter with a handle.

-Tanks must be 2.5 times the design flow.

-All advanced treatment units must be approved for use by the NMED.

-Advanced treatment units installed to meet a lot size constraint will be permitted with conditions such as maintenance contracts, monitoring of effluent etc.

-Holding tanks must be 4 times the design flow of the home, be watertight, have alarm systems, and pumping records must be provided to the Department.

-All installations must be installed in accordance with manufacturer's requirements.

Absorption Field

Conventional drain fields/leach field shall be allowed in suitable soils only. Suitable soil is determined by a ribbon test or percolation test. Square footage required for residential units are calculated as follows: Design Flow X 2 = Required Square Footage. For example a one bedroom home (150 gpd) requires 300 square ft. A two bedroom (300 gpd) requires 600 square ft. etc.

-Extremely clayey soils shall be calculated as follows: Design Flow X 5 = Required Square Footage.

-Soils that percolate too fast (course sand) will require secondary treatment/disinfection provided the water table is greater than 30 feet.

Trenches

In a conventional septic tank and absorption trench system, wastewater is gravity-fed or pumped from the septic tank/s to the absorption area. Trenches are usually constructed below ground surfaces and consist of a durable self supporting arch, gravel or sand.

-Disposal systems shall not be paved over or covered by concrete.

- Disposal systems shall not be subjected to vehicular traffic.

-Trenches shall be no longer than 160 ft.

- 4' of suitable soil below the trench is required.

-End caps must be placed on all distribution lines.

-Capped inspection ports are to be installed at the end of each trench and brought to grade.

-If more than one trench is being installed a T must be utilized.

- A distribution box is required if more than two trenches are being installed.

- Pressure dosing shall be utilized if more than 500 linear ft of leach line is required. - Pipe/Infiltration shall be level.
- Aggregate shall be ¾ in to 2 ½ inch in size, maximum of 3 ft of aggregate is allowed below the pipe.
- Trenches shall to 4 ft apart edge to edge. (For any additional ½ ft of gravel (in excess of 6 in) 1 ft of separation must be added.)
- Infiltrators must be 4 ft apart edge to edge.
- The length of a trench for pipe and gravel can be calculated by dividing the square footage required by the credit given per sq ft/linear ft.

Gravel under pipe is:	Trench is:	1' wide trench	2'wide	3'wide
	1'	3 Credits	4 Credits	5 Credits
	1.5'	4 Credits	5 Credits	6 Credits
	2'	5 Credits	6 Credits	7 Credits
	2.5'	6 Credits	7 Credits	
	3	7 Credits		

For example a trench that 2 'wide with 2' of gravel under the pipe requiring 750 sq ft of absorption would be calculated: 750(sq ft required) divided by 6 (credits) = 125 linear feet of trench.

-A trench that is utilizing chamber units varies in credit given per unit. (Ask for list) Infiltrators (High Capacity Quick 4 are awarded 21.6 sf/unit.) Divide square footage required by the awarded square footage to calculate the number of units required.

Grey Water Systems: Gray water with discharges less than 250 gallons per day of private residential greywater will be allowed if it can meet required conditions of the Regulations.

Property Transfer: An inspection of the system must undergo a Transfer of Ownership inspection by a licensed installer or a NAWT certified party at time of sale. When an inspection has been performed on a permitted or registered system within the last 180 days, or a system has been inspected, but has been unoccupied for up to one year since the inspection a waiver may be granted.

In Conclusion: If you have further questions or concerns you may contact the Taos Field Office staff at (575) 758-8808 or our Liquid Waste Specialist at (505) 827-1840. You may also obtain information or forms from our website: www.nmenv.state.nm.us under the programs/liquid waste tab.