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NEW MEXICO HEALTH AND SOCIAL SERVICES DEPARTMENT
Environmental Services Division

POLICY FOR
INDIVIDUAL WATER SUPPLIES AND SEWAGE DISPOSAL SYSTEMS

Approved by New Mexico State Board of Public Health
September 27, 1959

The development of fringe areas and subdivisions that do not have access to municipal water and sewage facilities is creating a continuously growing problem in proper protection of the public health in these areas. The situation has been accentuated due to the increased use of water, installation of garbage disposals and other automatic equipment, and the results of the high use of detergents. Septic tanks and leaching systems were never intended for use in closely built-up housing areas.

As a result of the above situations public health agencies are establishing minimum lot size requirements where individual water and/or sewage installations are concerned. Therefore, the New Mexico Health and Social Services Department has established a policy that is essentially in conformance with the recommendations of the American Public Health Association and also the American Society of Planning Officials.

Briefly, the policy for inspection or approval of all new subdivisions, including two or more lots, involving individual water and/or sewage installations by Health and Social Services Department personnel shall be based on the following minimum lot size requirements for each individual house:

a. One-half acre (21,780 sq. ft.), or larger, where both a private water supply and a private sewage disposal system are to be located on the same lot.

b. One-fourth acre (10,890 sq. ft.), or larger, where a public water supply is available but a private sewage disposal system is located on each lot.

It should be noted that the above policy requirements are minimum sizes of lots, as some conditions can very well require larger lots for adequate facilities.

The above policy on minimum lot sizes becomes effective January 1, 1960. The Federal Housing Administration (FHA) and Veterans Administration (VA) should be contacted in regard to developments that have lot sizes already approved. City and county planning commissions, subdivision developers, real estate men, and surveyors and engineers should be notified of this policy.

Your attention is also called to the new "Minimum Property Standards for One and Two Living Units", by FHA. These are minimum standards that must be met for FHA and VA construction, that became effective on July 1, 1959. Copies of these standards (M.P.S.) will be sent to each sanitarian. As approval of individual water and sewer installations is required by the local health authority, requests will be made to your office. This will cover both the approval forms and the new requirement for individual plot plan approval (See p. 6 of M.P.S.), that involves minimum distances and the location of private water and sewer installations, in addition to the minimum lot size.

The new FHA standards allow a minimum size of septic tank of 750 gallons for a two-bedroom house, a minimum size tank of 900 gallons for a three-bedroom house, 1,000 gallons for a four-bedroom house, and 250 gallons additional capacity for each bedroom over four. Although a minimum size of 750 gallons is required, it is recommended that 900 gallons be used, as additions to a two-bedroom house will make conformance with FHA and VA septic tank requirements difficult if a 750 gallon tank is installed.

The above septic tank sizes are identical with the recommendations in "Manual of Septic-Tank Practice," PHS publication No. 526. As uniformity of requirements is the aim of all concerned, a 750 gallon tank will be the minimum size approved by New Mexico Department of Public Health personnel. Changes in the State Uniform Plumbing Code are anticipated to complete this uniformity of control.

THE FUNCTION OF A SEPTIC TANK IS TO REMOVE THE SUSPENDED SOLIDS FROM SEWAGE. BACTERIA FEED UPON THE SOLIDS AND REDUCE MOST OF THEM TO GAS OR LIQUID. THE REMAINDER STAYS IN THE TANK AS SLUDGE. UNDER ORDINARY CONDITIONS, SLUDGE SHOULD BE REMOVED FROM THE SEPTIC TANK EVERY TWO YEARS, AND EITHER BURIED OR DISCHARGED INTO A MUNICIPAL SEWER. IT IS NOT NECESSARY TO NEED A SEPTIC TANK, NO SURFACE DISPOSAL OF SEPTIC TANK EFFLUENT IS ACCEPTABLE. WALLS OF A SEPTIC TANK MAY BE OF EITHER CONCRETE OR BLOCKS. IF BLOCKS ARE USED THE INSIDE WALLS ARE REQUIRED TO BE PLASTERED WITH A WATERPROOF PLASTER. A SEPTIC TANK IS REQUIRED TO BE WATER-TIGHT.

MINIMUM LOT SIZES ARE RECOMMENDED AS NECESSARY FOR PRIVATE SEWAGE DISPOSAL. NEW MEXICO DEPARTMENT OF PUBLIC HEALTH POLICY REQUIRES THE FOLLOWING LOT SIZES FOR EACH DWELLING, HOUSE: ONE-HALF ACRE (21,780 SQ. FT.), ON LANDS, WHERE WITH A PRIVATE WATER SUPPLY AND A PRIVATE SEWAGE DISPOSAL SYSTEM ARE TO BE LOCATED ON THE SAME LOT. ONE-FOURTH ACRE (10,890 SQ. FT.), ON LANDS, WHERE A PUBLIC WATER SUPPLY IS AVAILABLE, BUT A PRIVATE SEWAGE DISPOSAL IS LOCATED ON A LOT.

THE MINIMUM SPACE ON THE 4" SIDES (THE SPACE BETWEEN THE HOUSE AND SEPTIC TANK SHOULD BE 1½" PER FOOT, AND PREFERABLY 1½" PER FOOT, WITH THE 10" SECTION OF SEWER IMMEDIATELY AHEAD OF THE SEPTIC TANK BEING 1½" PER FOOT. THE SEWAGE FIELD MUST BE INSTALLED CAREFULLY WITH THE TILE ON PERFORATED PIPE LAID ON A GRADE OF 2" TO 3" PER 100' OF LENGTH, AND NEVER GREATER THAN 6" PER 100' OF LENGTH. THE MINIMUM CLEAR DISTANCE BETWEEN ADJACENT PARALLEL TRENCHES SHOULD BE NOT LESS THAN 3 TIMES THE TRENCH WIDTH. ONLY THE TRENCH BOTTOM IS USED IN DETERMINING ABSORPTION AREA FOR TRENCHES, WHILE ONLY THE BOTTOM AREA BELOW THE INLET IS EFFECTIVE ON SEEPAGE PITS.

A PERCOLATION TEST IS MADE BY DIGGING A 4" DIAMETER OR 6" SQUARE HOLE TO A DEPTH EQUAL TO THE PROPOSED DEPTH OF THE SEEPAGE TRENCHES. THE TEST HOLES SHOULD BE A MINIMUM OF 36" DEEP, AND BE REPRESENTATIVE OF THE SEEPAGE AREA. AT LEAST 2 TEST HOLES SHOULD ORDINARILY BE MADE. TEST HOLES SHOULD BE FILLED WITH WATER AND ALLOWED TO STAND OVERNIGHT BEFORE TESTS ARE MADE. AT THE TIME THE TESTS ARE MADE, THE HOLES SHOULD AGAIN BE FILLED WITH WATER TO A DEPTH OF AT LEAST 2 FEET. AT 3 OR 10-MINUTE INTERVALS RECORD THE TIME AND DEPTH TO WATER. WHEN THE RATE OF FALL IS SLOWER THAN 1" PER HOUR THE TIME REQUIRED FOR WATER TO DROP ONE INCH AND THEN USE TABLE No. 2 TO DETERMINE THE SQUARE FEET OF ABSORPTION AREA REQUIRED.

STEPS TO FOLLOW IN PLANNING A SEPTIC TANK AND SEEPAGE FACILITY: (1) DETERMINE NUMBER OF BEDROOMS AND SEPTIC TANK SIZE, (2) LOCATE SEPTIC TANK SITE, (3) MAKE PERCOLATION TESTS AND DETERMINE AMOUNT OF SEEPAGE AREA REQUIRED, (4) DETERMINE DEPTH AND GRADE OF SEWER LINE FROM HOUSE TO SEPTIC TANK INLET, (5) DETERMINE LOCATION OF SEEPAGE FACILITY, (6) DETERMINE DEPTH OF SEPTIC TANK INLET BELOW GROUND LEVEL, (7) DETERMINE DEPTH AND GRADE OF SEEPAGE LINES, (8) OBTAIN APPROVAL OF THE NEW MEXICO MECHANICAL BOARD PRIOR TO CONSTRUCTION, (9) CHECK TABLE No. 3 FOR COMPLIANCE, (10) CONSTRUCT SEPTIC TANK, SEWER LINES, AND SEEPAGE FACILITY.

TABLE No. 1 — REQUIRED SEPTIC TANK CAPACITIES

No. Bedrooms	Septic Tank Capacity	Septic Tank Dimensions: Length	Width	Liquid Depth	Total Depth
2 or less	750	7'-6"	3'-0"	4'-6"	5'-0"
3	900	8'-0"	3'-0"	4'-6"	5'-0"
4	1,000	8'-0"	3'-0"	4'-6"	5'-0"

FOR EACH ADDITIONAL BEDROOM ADD 250 GALLONS.

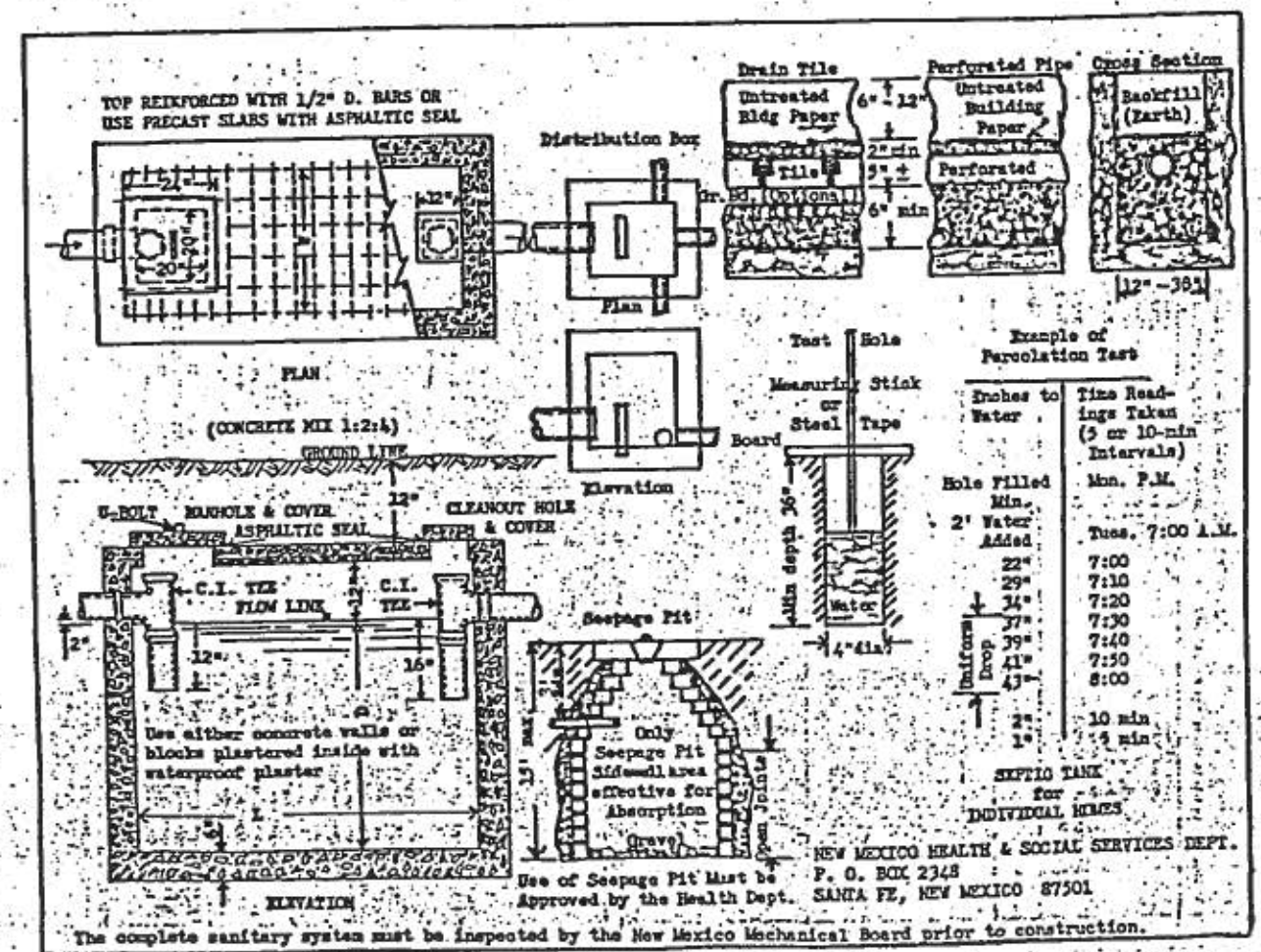
TABLE No. 2 — ABSORPTION AREA REQUIREMENTS FOR PRIVATE RESIDENCE

Percolation Rate (Time required for water to fall 1-inch in inches)	Required Absorption Area (Sq. Ft. per bedroom, standard trench, seepage pit)
1 or less	125
2	150
3	175
4	200
5	225
6	250
7	275
8	300
9	325
10	350

TABLE No. 3 — LOCATION OF SEWAGE DISPOSAL SYSTEM

Minimum distance in clear required from	Septic Tank	Disposal Field	Seepage Pit
Buildings and structures	5 feet	5 feet	20 feet
Property line adjoining private property	5 feet	5 feet	10 feet
Water lines	10 feet	10 feet	10 feet
Water supply wells*	100 feet	100 feet	100 feet
Streams*	25 feet	25 feet	100 feet
Large trees	10 feet	10 feet	10 feet
Seepage pits	5 feet	5 feet	5 feet

*MORE SPECIAL HEALTH HAZARDS ARE INVOLVED THE DISTANCE REQUIRED SHALL BE INCREASED AS MAY BE DIRECTED BY THE NEW MEXICO HEALTH AND SOCIAL SERVICES DEPARTMENT AND THE NEW MEXICO MECHANICAL BOARD.



The complete sanitary system must be inspected by the New Mexico Mechanical Board prior to construction.