N-MOWA

New Mexico Onsite Wastewater Association, Inc
PO Box 1424
Ruidoso, NM 88355

EIB 11-10 (

April 15, 2011

Felicia Orth, Acting Administrator
New Mexico Environmental Improvement Board
Harold Runnels Building, Rm N2150
1190 St. Francis Drive
Santa Fe, New Mexico 87505

Re: Petition for Public Hearing to Consider a Proposed Amendment to the Liquid Waste Disposal and Treatment Regulations, 20.7.3 NMAC.

Dear Ms. Orth:

New Mexico Onsite Wastewater Association ("N-MOWA) respectfully requests a hearing before the Environmental Improvement board ("EIB") on a proposed amendment to 20.7.3 NMAC, Liquid Waste Disposal and Treatment regulations.

N-MOWA supports the Environmental Health Division petition in general. **Attachment A** to this petition shows the amendments being proposed to the affected sections. **Attachment B** to this petition is a copy of the entire rule, with the amendments in red line.

We respectfully request that the Board consider this Petition at its meeting on May 2, 2011.

Thank you for your consideration of this request.

Sincerely,

Jace Ensor
President, N-MOWA

global positioning system COPS) coordinates of the tank. Once an inspection is requested, all results, whether complete or not, shall be submitted to the department.

~~G~~H. In the event of a failed system, that includes, but is not limited to disposal fields, the owner shall remedy the failed system with department approval.

[20.7.3.902 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.904 REQUIREMENTS FOR ~~CERTIFICATION~~ QUALIFICATION:

A. Qualified homeowner.

(1) A homeowner must become qualified to install an on-site liquid waste system.

(2) Homeowner training materials and opportunities for exams, by appointment, shall be available at all department field offices.

(3) A qualified homeowner may apply for a pennit to install or modify a conventional on-site liquid waste treatment and disposal system serving their personnel residence in accordance with Subsection C of 20.7 .3.401 NMAC.

(4) A qualified homeowner shall not be allowed to install or modify an onsite liquid waste system serving a rental unit or other property that is not the qualified homeowner's personal residence.

(5) A homeowner qualification shall be valid for one year, or longer as approved by the department for good cause shown.

(6) A qualified homeowner may install no more than one liquid waste system during each twelve month period.

B. Third party inspector.

(1) Inspections of liquid waste systems prior to property transfers are required by 20.7.3.902 NMAC. The department shall inspect unpermitted liquid waste systems. Third party inspectors shall inspect pemitted liquid waste systems.

(2) Qualification as a third party inspector, in addition to, a valid and appropriate classification of licensure (MM1, MM98, MS3) by the construction industries division of the regulation and licensing department, shall be based on one of the following:

(a) certification as a professional engineer with a specialty sub-discipline of on-site wastewater engineering;

(b) accreditation in on-site wastewater inspection by the national sanitation foundation (NSF);

(c) certification by the national environmental health association (NEHA) as an installer of on-site wastewater treatment systems; or

(d) NAWT certified inspector by National Association of Wastewater Transporters, Inc. or

(~~d~~e) demonstration of a combination of training and experience as approved by the department.

(~~e~~f) inspection of advanced wastewater treatment systems shall be performed only by persons qualified pursuant to Subsection ~~D~~ C ~~or~~ of 20.7.3.904.

C. Maintenance service provider of an advanced treatment system.

(1) Maintenance service providers shall comply with 20.7.3.903 NMAC.

(2) In order to obtain approval by the department, ~~and in addition to receiving a recommendation for approval by the wastewater technical advisory committee,~~ manufacturers of advanced treatment systems shall provide a written training and certification program, for approval by the department, for installers and maintenance

service providers of their systems. Installers and maintenance service providers of advanced treatment systems shall receive the training approved by the department at least once ~~per year~~ every three (3) years. Department representatives may audit training classes provided by the manufacturers for the purpose of evaluating the training provided.

(3) Maintenance service providers for orphaned advanced treatment systems shall be qualified by the department. Qualification as a maintenance service provider for orphaned systems in addition to one manufacture maintenance service provider certification will based on the following:

(a) certification as an advanced small systems, level III or Level IV wastewater operator form the state of New Mexico;

(b) certification at an acceptable level as a wastewater operator from another state~~; or~~

(c) 16 hours of continuing education units (CEU's) in advanced treatment operation and maintenance;

(d) NAWT operations and maintenance one and two; or

(e) Other credentials, as approved by the department.

G. Suspensions, revocation and denials.

(1) The department may deny a qualification if it determines that an applicant does not meet all eligibility requirements set forth above.

(2) The department, at any time, may suspend or revoke a qualification for cause to include fraud, misrepresentation, failure to provide required documentation, failure to provide service in accordance with the qualification or failure to comply with 20.7.3 NMAC. Suspension or revocation shall be by issuance of an Order.

(3) Any person who desires to appeal a denial, suspension, revocation or disqualification may appeal to the secretary. An appeal is initiated by submitting a request for a hearing. The request for a hearing must be in writing and made no later than 30 days after notice of the action is served. Upon such request, the secretary shall conduct a hearing pursuant to the adjudicatory procedures in 20.1.5 NMAC..

~~A. The department will develop a certification program by July 1, 2007 that addresses the specifications below and as provided by law. After July 1, 2009:~~

~~(1) any person offering services pertaining to an on-site liquid waste system, including site evaluator, system designer, installer, wastewater reuse irrigator, inspector, maintenance service provider or septage pumper, shall be certified after completing a program and passing an exam approved by the department;~~

~~(2) employees of the department reviewing, approving or inspecting on site liquid waste systems shall be certified as department liquid waste specialist after completing a program and passing an exam approved by the department; and~~

~~(3) a homeowner shall complete a program and pass an exam approved by the department prior to the issuance of a permit for a homeowner installed system.~~

~~B. General requirements for certifications of persons involved in the liquid waste program are specified below.~~

~~(1) Site evaluators shall demonstrate competence in soil evaluation to determine acceptable liquid waste disposal application rates and identify potential areas of concern, such as fractured bedrock, shallow ground water and karst terrain.~~

~~(2) Liquid waste system designers that configure conventional treatment systems and approved proprietary advanced systems shall demonstrate competence in configuration of on site liquid waste systems, certification by the manufacturer of~~

ATTACHMENT B

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 7 WASTE WATER AND WATER SUPPLY FACILITIES
PART 3 LIQUID WASTE DISPOSAL AND TREATMENT

20.7.3.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.
[20.7.3.1 NMAC - Rp, 20.7.3.1 NMAC, 9/1/05]

20.7.3.2 SCOPE:

A. This part, 20.7.3 NMAC, applies to on-site liquid waste systems, and effluent from such systems, that are designed to receive and do receive two thousand (2,000) gallons or less of liquid waste per day, and that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC or a national pollutant discharge elimination system (NPDES) permit.

B. 20.7.3.306 and 809 NMAC apply to the disposal of on-site septage and holding tank wastes.

[20.7.3.2 NMAC - Rp, 20.7.3.2 NMAC, 9/1/05]

20.7.3.3 STATUTORY AUTHORITY: NMSA 1978, Sections 74-1-6, 74-1-7(A)(3), 74-1-8(A)(3), and 74-1-9(Repl. Pamp 1993 and Cum. Supp. 1997).
[20.7.3.3 NMAC - Rp, 20.7.3.3 NMAC, 9/1/05]

20.7.3.4 DURATION: Permanent.
[20.7.3.4 NMAC - Rp, 20.7.3.4 NMAC, 9/1/05]

20.7.3.5 EFFECTIVE DATE: September 1, 2005, except where a later effective date is indicated in the history note at the end of a section.
[20.7.3.5 NMAC - Rp, 20.7.3.5 NMAC, 9/1/05]

20.7.3.6 OBJECTIVE: To protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and ground water contamination from on-site liquid waste disposal practices.
[20.7.3.6 NMAC - Rp, 20.7.3.6 NMAC, 9/1/05]

20.7.3.7 DEFINITIONS: As used in 20.7.3 NMAC.

A. Terms starting with the letter 'A' are defined as follows:

(1) "absorption area" means the area in square feet of infiltrative surface in a soil disposal system designated to receive effluent from a treatment unit;

(2) "advanced treatment" means any process of wastewater treatment that removes a greater amount of contaminants than is accomplished through primary treatment; advanced treatment may include physical or chemical processes;

(3) "aggregate" means clean washed gravel (no greater than 4% fines by weight), clean crushed rock, proprietary or other media reviewed by the technical advisory committee and approved by the department; "aggregate" shall have a minimum size of 3/4 inch and a maximum size of 2 1/2 inches and provide no less than 35% void space under field conditions; the

aggregate shall be durable, inert, and shall have a hardness value of 3 or more on the Mohs scale of hardness so it will maintain its integrity, not collapse or disintegrate with time, and not be detrimental to the performance of the system;

(4) "alternative disposal" means any approved on-site liquid waste disposal method used in lieu of, including modifications to, a conventional disposal method; these include but are not limited to, mounds, evapotranspiration beds, and pressure dosed systems;

(5) "amendment of permit" means a change that does not affect the permitability of a liquid waste system, including a change of ownership, and is not a "modification" as defined in this section;

(6) "approved" means:

(a) materials, products or procedures that have been reviewed by the technical advisory committee, if required, and accepted for use by the department;

(b) a liquid waste system that was permitted, constructed and installed in compliance with the standards and requirements of this regulation; or

(c) a person or entity authorized by the department to design, install, modify or maintain liquid waste systems or a person authorized by the department to perform site or liquid waste system evaluations; and

(7) "arroyo" means a dry wash or draw that flows occasionally, a watercourse (as a creek or stream) in an arid region or a water carved gully or channel.

B. Terms starting with the letter 'B' are defined as follows:

(1) "bedrock" means the more or less solid, undisturbed rock in place either at the surface or beneath surficial deposits of gravel, sand or soil, or a consolidated rock formation of impervious material that may exhibit jointed, fractured or deteriorated characteristics, or the R horizon of a soil profile as defined in the USDA soil survey manuals;

(2) "bedroom" means any room or unfinished area within a building that is designated or might reasonably be used as a sleeping room pursuant to the responsible building permitting authority or manufactured housing authority;

(3) "biochemical oxygen demand" or "BOD" means the rate at which organisms use the oxygen in water or wastewater while stabilizing decomposable organic matter under aerobic conditions;

(4) "blackwater" means waste from a liquid flushing toilet, urinal, kitchen sinks, dishwashers or laundry water from the washing of material soiled with human excreta, such as diapers;

(5) "body of water" means all constrained water including water situated wholly or partly within or bordering upon New Mexico, whether surface or subsurface, public or private;

(6) "building drain" means that part of the lowest piping of a drainage system that receives the collective liquid waste discharge from soil, waste and other drainage piping inside a building and conveys it to the building sewer that begins two (2.0) feet outside the vertical plane of the building wall, residential or commercial unit; and

(7) "building sewer" means that part of the horizontal piping of a drainage system that extends from the end of the building drain located two (2.0) feet outside the building wall and that receives the liquid waste discharge from the building drain and conveys it to a liquid waste treatment unit or approved point of disposal.

C. Terms starting with the letter 'C' are defined as follows:

(1) "canal" means a man-made ditch or channel that carries water for purposes other than domestic consumption;

(2) "certificate of registration" means a permit for the continued operation of a previously unpermitted on-site liquid waste system;

(3) "cesspool" means an excavation or non-water tight unit that receives untreated water-carried liquid waste allowing direct discharge to the soil;

(4) "clay" means:

(a) a soil separate consisting of particles less than 0.002 millimeters in diameter; or

(b) the textural class name of any soil that contains 40% or more clay, less than 45% sand and less than 30% silt;

(5) "clearance" means the vertical thickness of suitable soil between the lowest point of a liquid waste disposal system and the seasonal high ground water table, bedrock or other limiting layer;

(6) "cluster system" means a wastewater system that serves more than one unit and treats 2000 gallons per day or less of wastewater;

(7) "coarse sand" means soil comprised of 25% or more of soil particles 0.5 to 2.0 mm in diameter and less than 50% of any other grade of sand;

(8) "commercial liquid waste" means wastewater, whether treated or untreated, that exceeds 300 mg/l BOD, 300 mg/l TSS, 80 mg/l total nitrogen or 105 mg/l fats, oils and grease;

(9) "commercial unit" means a structure that is not a residential unit but which has sewage producing fixtures such as sinks, baths, showers, toilets, urinals, dish- and clothes-washers or floor drains for receiving liquid waste including but not limited to uses included in Table 201.1;

(10) "conventional disposal" means a subsurface soil absorption system with gravity distribution of the effluent, with or without a lift station, constructed in accordance with the standards set forth in this regulation, including trench or bed absorption areas and seepage pits;

(11) "conventional treatment" means a septic tank where primary treatment occurs; and

(12) "conventional treatment system" means an on-site liquid waste system utilizing both conventional treatment and conventional disposal; for fee purposes only, "conventional treatment system" includes privies, holding tanks and vaults.

D. Terms starting with the letter 'D' are defined as follows:

(1) "degrade a body of water" means to reduce the physical, chemical or biological qualities of a body of water and includes, but is not limited to, the release of material that could result in the exceeding of standards established by 20.6.4 NMAC, Standards for Interstate and Intrastate Surface Waters, by 20.6.2 NMAC, Ground and Surface Water Protection and by 20.7.10 NMAC, Drinking Water;

(2) "department" means the New Mexico environment department;

(3) "design flow" means the flow rate for which an on-site liquid waste system must be designed in order to assure acceptable system performance, assuming the use of conventional plumbing fixtures;

(4) "disinfected" or "disinfection" means the use of any process designed to effectively kill most micro-organisms contained in liquid waste effluent including essentially all pathogenic (disease causing) organisms, as indicated by the reduction of the fecal coliform

concentration to a specific level; these processes include, but are not limited to, suitable oxidizing agents such as chlorine, ozone and ultraviolet light;

(5) "disposal system" means a generally recognized system for disposing of the discharge from a liquid waste treatment unit and includes, but is not limited to, seepage pits, drainfields, evapotranspiration systems, sand mounds and irrigation systems;

(6) "domestic liquid waste" means wastewater that does not exceed 300 mg/l BOD, 300 mg/l TSS, 80 mg/l total nitrogen or 105 mg/l fats, oils and grease; and

(7) "drainage ditch" means an unlined trench dug for the purpose of draining water from the land or for transporting water for use on the land.

E. Terms starting with the letter 'E' are defined as follows:

(1) "edge of a watercourse, canal or arroyo" means that point of maximum curvature at the upper edge of a definite bank or, if no definite bank exists, the highest point where signs of seasonal high water flow exist;

(2) "effluent" means the discharge from the final treatment unit;

(3) "effluent disposal well" means a prohibited method of disposal consisting of a drilled, driven or bored shaft or dug hole with depth greater than any surface dimension, used for subsurface emplacement of liquid waste, including, but not limited to, abandoned water supply wells, irrigation wells and test holes, but excluding seepage pits used as disposal systems, which conform to the standards in 20.7.3.702 NMAC;

(4) "elevated system" means a system installed either partially or completely above grade in a constructed fill area for the purpose of meeting clearance to a limiting layer.

(5) "enclosed system" means a watertight on-site liquid waste system that does not discharge to the soil, including, but not limited to, holding tanks and lined evapotranspiration systems;

(6) "established on-site liquid waste system" means an on-site liquid waste system that has been in active use at any time during the ten (10) years prior to submission of a permit application and in compliance with any liquid waste disposal regulation in effect at the time of installation, excluding the permitting or registration process, but does not include cesspools installed after September 14, 1973;

(7) "evapotranspiration system" means a disposal system designed to dispose of effluent through evaporation and plant uptake and transpiration; and

(8) "experimental system" also referred to as "innovative technology" means, without limitation, any on-site liquid waste system utilizing a method of liquid waste treatment technology, processes, equipment or components that are not fully proven in the circumstances of their intended use, but, based upon documented research and demonstration, appear to offer benefits which outweigh the potential risks of failure, or a method of disposal that is not currently approved by the department; experimental systems shall be submitted for review to the wastewater technical advisory committee (WTAC) who shall recommend the system for full approval, recommend approval with conditions or reject the proposed system; final approval of experimental systems shall be at the discretion of the secretary.

F. Terms starting with the letter 'F' are defined as follows:

(1) "failed system" means, without limitation, an on-site liquid waste system that does not operate as permitted, that does not provide a level of treatment at least as effective as that provided by on-site liquid waste systems that meet the requirements of 20.7.3 NMAC or that poses a hazard to public health or degrades a body of water; and

(2) "fixture units" means a quantity of flow as defined in the UPC upon which plumbing systems are sized.

G. Terms starting with the letter 'G' are defined as follows:

(1) "gravels" means, for purposes of soils classification, a soil separate consisting of particles greater than 2 mm in diameter;

(2) "graywater" means untreated household wastewater that has not come in contact with toilet waste and includes wastewater from bathtubs, showers, washbasins, clothes washing machines and laundry tubs, but does not include wastewater from kitchen sinks, dishwashers or laundry water from the washing of material soiled with human excreta, such as diapers; and

(3) "ground water" means interstitial water that occurs in saturated earth material and is capable of entering a well in sufficient amounts to be utilized as a water supply.

H. Terms starting with the letter 'H' are defined as follows:

(1) "hazard to public health" means the indicated presence in water or soil of biological, chemical or other contaminants under such conditions that could adversely impact human health, including surfacing liquid waste, degradation to a body of water used as, or has the potential to be used as, a domestic water supply source, presence of an open cesspool or tank or exposure of liquid waste or septage in a manner that allows transmission of disease;

(2) "holding tank" means a non-discharging watertight tank designed to receive and retain liquid waste for periodic pumping and disposal off-site;

(3) "homeowner" means a person or persons who owns and occupies, or plans to occupy, a single family home; and

(4) "household hazardous waste" means a wide range of household products that have the characteristics of hazardous waste when discarded, including but not limited to, pesticides and herbicides, oil-based paints and stains, automobile fluids (antifreeze, motor oil, transmission, steering and brake fluids, gasoline), pool chemicals, hobby chemicals and darkroom chemicals.

I. Terms starting with the letter 'I' are defined as follows:

(1) "imminent hazard to public health or safety" means any situation with the potential to immediately and adversely impact or threaten public health or safety;

(2) "impervious formation" means any soil or rock formation with a hydraulic conductivity of 10^{-7} cm/sec or less;

(3) "industrial process wastewater" means non-household wastewater, excepting the following: human excreta; used water from showers, washbasins and dishwashers; and food preparation waste; any wastewater generated in a commercial activity that contains the materials prohibited by Subsection A of 20.7.3.304 NMAC is industrial process wastewater;

(4) "inspector" means a person certified by the department to be competent in the physical examination and evaluation of on-site liquid waste systems;

(5) "interstitial water" means water in spaces between solid earth particles; and

(6) "invert" means the lowest portion of the internal cross section of a pipe or fitting.

J. Terms starting with the letter 'J' are defined as follows: [RESERVED]

K. Terms starting with the letter 'K' are defined as follows: [RESERVED]

L. Terms starting with the letter 'L' are defined as follows:

(1) "lateral" means a secondary water or wastewater pipeline branching directly from a central supply pipeline or manifold leading to an irrigation site;

(2) "limiting layer" means an impervious formation, bedrock or the seasonal high ground water table;

(3) "liner" means a manufactured or naturally occurring substance that restricts seepage to no more than 10^{-7} cm/sec. over the design service life of the lined unit; manufactured liners must have a minimum single-ply thickness of 20 mils and have no leaks;

(4) "liquid capacity" means the volume of liquid that is contained in a septic tank or treatment unit measured from the invert of the outlet; "liquid capacity" shall be calculated by multiplying the inside length by the inside width by the depth measured from the invert of the outlet to the unit's floor and converting the resulting sum to gallons;

(5) "liquid waste" means the discharge of wastewater from any residential or commercial unit where the total wastewater discharge on a lot is 2000 gallons per day or less; liquid waste includes without limitation human excreta and water carried waste from plumbing fixtures, including, but not limited to, wastes from toilets, sinks, showers, baths, clothes- and dish-washing machines and floor drains; liquid waste also includes non-water carried wastes discharged into holding tanks, privies and vaults; specifically excluded from the definition of liquid waste are industrial process wastewaters, roof drainage, mine or mill tailings or wastes;

(6) "liquid waste system" means all liquid waste treatment units and associated disposal systems, or parts thereof, serving a residential or commercial unit on a lot; liquid waste systems include enclosed systems, holding tanks, vaults and privies but do not include systems or facilities designed to receive or treat mine or mill tailings or wastes;

(7) "liquid waste treatment unit" means a component of the on-site liquid waste system where removal, reduction or alteration of the objectionable contaminants of wastewater is designed to occur; it may include a holding component but does not include soil;

(8) "load" or "loading" means:

(a) in the context of the biological or chemical load received by an on-site liquid waste system, the amount of material applied to an on-site system liquid waste component per unit area or unit volume;

(b) in the context of the structural load applied to an on-site liquid waste structural component, the structural force applied to a liquid waste system component per surface area; and

(9) "lot" means a unified parcel excluding roadways and roadway easements, legally recorded or validated by other means; "lot" includes any contiguous parcel subject to a legally recorded perpetual easement that dedicates the servient parcel for the disposal of liquid waste generated on the dominant parcel.

M. Terms starting with the letter 'M' are defined as follows:

(1) "maintenance contract" means a contract between the system owner and a maintenance service provider in which the maintenance service provider agrees to provide periodic inspections in regards to the operation, maintenance and repair of the system;

(2) "maintenance service provider" means a public entity, company or individual in the business of maintaining liquid waste systems according to manufacturers' specification;

(3) "manifold" means a part of a water distribution system normally located between the laterals and central supply line; the manifold splits the flow into a number of flows, either for distribution or for application to the land;

(4) "may" means discretionary, permissive or allowed; and

(5) "modify" or "modification" of a liquid waste system means:

(a) to change the method of on-site liquid waste treatment or disposal;

(b) to change the design of the on-site liquid waste system;

(c) to increase the design flow or load received by the on-site liquid waste system above the original design flow or load; or

(d) replace or expand the treatment unit or disposal system.

N. Terms starting with the letter 'N' are defined as follows: [RESERVED]

O. Terms starting with the letter 'O' are defined as follows:

(1) "off-site water" means the domestic water supply for the lot is from:

(a) a private water supply source that is neither within the lot nor outside the lot within one hundred (100) feet of the property line of the lot; or

(b) a public water supply source that is not within the lot;

(2) "on-site" means located on or within a lot;

(3) "on-site liquid waste system" means a liquid waste system located on the lot where the liquid waste is generated;

(4) "on-site water" means the domestic water supply for the lot is from:

(a) a private water supply source that is within the lot or within one hundred (100) feet of the property line of the lot; or

(b) a public water supply source that is within the boundaries of the lot;

(5) "orphaned advanced treatment system" means an advanced liquid waste treatment system whose manufacturer no longer exists or that is no longer approved for installation in the State of New Mexico, or for which the manufacturer no longer provides training in maintenance activities; and

(~~5~~6) "owner" means any person who owns an on-site liquid waste system or any component thereof, or any lot upon which any on-site liquid waste system or any component thereof is located.

P. Terms starting with the letter 'P' are defined as follows:

(1) "percolation rate" means the rate of entry of water into soil as determined by a standard soil percolation test at the depth and location of the proposed soil disposal system;

(2) "permanently displayed" means, in context of septic tank legends, embossed into the tank surface or a mechanically attached, non-corrosive plate;

(3) "permit" means a written approval from the department to install, modify, or operate an on-site liquid waste system;

(4) "permittee" means any owner of a permitted on-site liquid waste system;

(5) "person" means any individual, partnership, firm, public or private corporation, association, trust, estate, the state or any political subdivision or agency or any other legal entity or their legal representative, agents or assigns;

(6) "primary treatment" means a liquid waste treatment process that takes place in a treatment unit and allows those substances in wastewater that readily settle or float to be separated from the water being treated;

(7) "private water supply source" means a water supply source such as a well, spring, infiltration gallery or surface water withdrawal point used to provide water to a water supply system, if such system does not have a least fifteen (15) service connections and does not serve an average of twenty-five (25) individuals at least sixty (60) days out of the year;

(8) "privy" or "outhouse" means a receptacle for non-liquid-carried human excreta allowing direct discharge to the soil;

(9) "professional engineer" or "P.E." means a professional engineer licensed under the New Mexico Engineering and Survey Practice Act; "professional engineer" includes

engineers licensed in any state of the United States for engineering related to a product design and manufacture of propriety products;

(10) "proprietary system" means a system patented, trademarked or otherwise the intellectual property of manufacturers not in the public domain; and

(11) "public water supply source" means a water supply source such as a well, spring, infiltration gallery or surface water intake structure used to provide water to a public water supply system for human consumption if the system served has at least fifteen (15) service connections or regularly services an average of twenty-five (25) individuals at least sixty (60) days out of the year.

Q. Terms starting with the letter 'Q' are defined as follows: ~~[RESERVED]~~

(1) "qualified homeowner" means a person who has been provided a homeowner installation training material and who has passed an exam administered by the department.

R. Terms starting with the letter 'R' are defined as follows:

(1) "repair" means servicing or replacing, with like kind, mechanical or electrical parts of an approved liquid waste system, pumping of septage or making minor structural corrections to a tank or distribution box;

(2) "residential unit" means a structure that is primarily used for living quarters but does not include facilities listed in Table 201.1;

(3) "replacement area" means an unobstructed area within a lot designated to allow future construction of a replacement disposal area as required by Subsection H of 20.7.3.201 NMAC;

(4) "retention/detention area" means an area on a parcel of property specifically designated and designed to capture and hold water resulting from the runoff of precipitation; and

(5) "roadway" means the surface area of land dedicated by easement or use to provide vehicular passage serving more than one lot or more than five residential or commercial units on a single property.

S. Terms starting with the letter 'S' are defined as follows:

(1) "sand" means:

(a) a soil separate consisting of individual rock or mineral fragments that range in diameter from 0.05 to 2.0 millimeters; or

(b) the textural class name of any soil that contains 85% or more sand and not more than 10% clay;

(2) "seasonal high ground water table" means the highest level to which the upper surface of ground water may be expected to rise within twenty-four (24) consecutive months;

(3) "seasonal high water flow" means the highest level that perennial or intermittent surface waters may be expected to rise as a result of a 25 year, 6 hour storm event;

(4) "secondary treatment" means a wastewater treatment process used to convert dissolved or suspended materials into a form more readily separated from the water being treated; the process is commonly a biological treatment process followed by settling and clarification resulting in a reduction of the 5-day biochemical oxygen demand (BOD5) and total suspended solids (TSS) concentrations to a level specified in 20.7.3.602 NMAC;

(5) "secretary" means the secretary of environment or a designated representative;

(6) "seepage pit" means a type of absorption system that uses a vertical, cylindrical, underground receptacle so constructed as to allow the disposal of effluent by soil absorption through its walls;

(7) "septage" means the residual wastes and water periodically pumped from a liquid waste treatment unit or from a holding tank;

(8) "septic tank" means a liquid waste treatment unit designed to provide primary treatment and anaerobic treatment prior to disposal;

(9) "setback distance" means the distance measured by a straight horizontal line between the on-site liquid waste system, its designated replacement area, or portion thereof, and the object being considered;

(10) "shall" means mandatory;

(11) "silt" means:

(a) a soil separate consisting of particles between 0.05 and 0.002 millimeters in diameter; or

(b) the textural class name of any soil that contains 80% or more silt and less than 12% clay;

(12) "soil" means sediment or other unconsolidated accumulations of mineral particles that may or may not contain organic material and that have filtering properties;

(13) "suitable soil" means a soil, whether naturally occurring or introduced, that will treat the primary effluent effectively and act as an effective filter and remove organisms and suspended solids prior to the effluent reaching ground water, bedrock or a limiting layer, and that will provide adequate transmission to prevent a failed system; suitable soils are classified Table 703.1; and

(14) "surface application" means the application of disinfected effluent to the ground surface where access is restricted by artificial or natural conditions.

T. Terms starting with the letter 'T' are defined as follows:

(1) "technical advisory committee" or "TAC" means the wastewater technical advisory committee created by NMSA 1978 Section 9-7A-15;

(2) "tertiary treatment" means additional treatment beyond secondary treatment standards, specifically, the reduction in the total nitrogen concentration;

(3) "test hole" means a hole dug in the proposed disposal field area a minimum of seven (7) feet deep or four (4) feet below the bottom of disposal field, whichever is greater, and a minimum of two (2) feet wide; the test hole shall be sufficient to examine the soil visually for type, structure, mottling, impervious layers and other soil characteristics, and to determine the seasonal high water table level; a soil boring may be used to determine the soil characteristics and soil depth;

(4) "total design flow" means the sum of design flows for all on-site liquid waste systems and other wastewater discharges on a lot;

(5) "total nitrogen" or "TN" means the combined organic nitrogen, ammonia, nitrite and nitrate contained in the wastewater or effluent; and

(6) "total suspended solids" or "TSS" means the measurable component of solid matter suspended in water or wastewater.

U. Terms starting with the letter 'U' are defined as follows:

(1) "uniform plumbing code" or "UPC" means the 1997 uniform plumbing code, 14.11.3 NMAC and the 1997 state of New Mexico plumbing code and mechanical code, 14.9.2 NMAC, or the successor versions of each as adopted by the construction industries division of the New Mexico regulation and licensing department and promulgated in the New Mexico administrative code or another applicable code as adopted by the authority having jurisdiction; and

(2) [RESERVED]

V. Terms starting with the letter 'V' are defined as follows:

(1) "vault" means a non-discharging, watertight tank designed to receive and retain non-liquid carried human excreta for periodic pumping and disposal off-site; and

(2) "variance" means an administrative procedure authorizing the issuance of a permit or use of a system that does not meet the specific requirements of 20.7.3 NMAC but which meet the intent of 20.7.3 NMAC.

W. Terms starting with the letter 'W' are defined as follows:

(1) "wastewater" means blackwater and graywater;

(2) "watercourse" means any perennial, intermittent or ephemeral surface water conveyance channel including but not limited to a river, creek, arroyo, draw, canal or wash, or any other channel having definite banks and beds with visible evidence of the flow of water;

(3) "water(s) of the state" means all interstate and intrastate waters including natural ponds and lakes, playa lakes, reservoirs, perennial streams and their tributaries, intermittent streams, sloughs, prairie potholes and wetlands;

(4) "watertight" means not allowing water to pass in or out or as otherwise determined in 20.7.3 NMAC; and

(5) "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico; constructed wetlands are not included in this definition.

X. Terms starting with the letter 'X' are defined as follows: [RESERVED]

Y. Terms starting with the letter 'Y' are defined as follows: [RESERVED]

Z. Terms starting with the letter 'Z' are defined as follows: [RESERVED]

[20.7.3.7 NMAC - Rp, 20.7.3.7 NMAC, 9/1/05; A, 4/1/07]

20.7.3.8 GENERAL PROVISIONS:

A. Interpretation: The definitions in 20.7.3.7 NMAC shall be construed so as to achieve the objective of 20.7.3 NMAC.

B. Alternative Resources: When guidance is sought in areas not covered by 20.7.3 NMAC, the most recent version of the following resources may provide guidance. In cases where reference to these alternative resources is proposed the department shall make the final determination of applicability.

(1) The American national standards institute (ANSI) book of codes.

(2) The American society for testing and materials (ASTM) testing manual.

(3) The international association of plumbing and mechanical officials (IAPMO) codes.

(4) The National sanitation foundation (NSF) standard 40, standard 41, and standard 46.

(5) EPA design manuals for onsite wastewater treatment and disposal systems.

(6) USDA soil survey manuals.

(7) New Mexico administrative code.

(8) Wisconsin mound soil absorption system: siting, design and construction manual, university of Wisconsin-Madison.

C. The department field offices shall make educational materials regarding on-site liquid waste systems available to the public and to permit applicants. Information on proper

maintenance of systems shall be given to new permittees. Educational materials shall be in both English and Spanish.
[20.7.3.8 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05]

20.7.3.9 through 20.7.3.200 [RESERVED]

20.7.3.201 PROCEDURES; GENERAL REQUIREMENTS:

A. Every owner shall be responsible for the storing, treating and disposing of liquid waste generated on that property.

B. No person shall discharge untreated liquid waste except into a permitted enclosed system, a permitted liquid waste treatment unit or a public sewer system, except for the discharge of graywater pursuant to 20.7.3.810 NMAC. No person shall discharge liquid waste or effluent into a cesspool or effluent disposal well.

C. No person shall discharge effluent from a liquid waste treatment unit except through a permitted liquid waste disposal system or to a permitted sewer system. No person shall discharge effluent from a liquid waste treatment unit to an effluent disposal well.

D. No person shall install, have installed, modify or have modified, own, operate or use an on-site liquid waste system that, by itself or in combination with other on-site liquid waste systems, may cause a hazard to public health or degrade any body of water.

E. All residential and commercial units utilizing an on-site liquid waste system shall connect to a public sewer if required by the local authority having jurisdiction.

F. The type of on-site liquid waste system shall be determined on the basis of location, lot size, soil and site characteristics. The system, except as otherwise approved, shall consist of a liquid waste treatment unit and associated disposal system.

G. An on-site liquid waste system shall be located wholly on the same lot, which is the site of the source or sources served by the on-site liquid waste system.

H. All disposal systems that utilize subsurface discharge and soil absorption shall be designed with an unobstructed replacement or reserve area so that additional seepage pits, drainfields or other subsurface absorption areas equivalent to at least 50% of the required original disposal system may be installed if the original system cannot dispose of all the liquid waste or the system needs to be expanded. No division of a lot or construction or remodeling of a permanent structure on the lot shall be made if such division, construction or remodeling impairs the usefulness of the 50% replacement area.

I. A privy may be used for the disposal of human excreta and toilet paper, but not for the disposal of other liquid wastes.

J. On-site liquid waste systems, other than holding tanks, receiving waste from recreational vehicles (RVs) shall provide pretreatment of the waste to the level of domestic waste as defined in Paragraph (6), Subsection D of 20.7.3.7 NMAC. Existing permitted on-site liquid waste systems receiving waste from recreational vehicles shall continue to be authorized to operate. Upon modification of these existing systems, the system shall be required to provide pretreatment of the waste.

K. On-site liquid waste systems permitted, but not installed, prior to the effective date of 20.7.3 NMAC shall be installed in accordance with the regulations in effect at the time of the permit issuance, provided that the installation of the system shall be completed within one (1) year of the effective date of 20.7.3 NMAC.

L. On-site liquid waste systems installed prior to the effective date of 20.7.3 NMAC shall meet the requirements of the regulations in effect at the time of their initial installation, or if there has been a prior permitted modification, the regulations in effect at the time of the most recent permitted modification will apply or the current regulations, whichever is less stringent.

M. Nothing contained in 20.7.3 NMAC shall be construed to prevent the department from requiring compliance with more stringent requirements than those contained herein, where the department finds that such more stringent requirements are necessary to prevent a hazard to public health or the degradation of a body of water. The following parameters may be considered when determining if a body of water is potentially vulnerable to degradation from liquid waste effluents, and if more stringent requirements may be necessary to prevent such degradation:

(1) a water-table aquifer (includes both unconfined and semi-confined conditions) with a vadose zone thickness of 100 feet or less containing no soil or rock formation that would act as a barrier to saturated or unsaturated wastewater flow;

(2) sites within one quarter (1/4) mile of a known groundwater plume of anthropogenic anoxic or nitrate contamination caused by migration through undisturbed vadose zone, provided that the site overlies the same aquifer;

(3) an aquifer overlain by fractured bedrock;

(4) an aquifer in karst terrain; and

(5) a gaining stream impacted by nutrients from liquid waste systems.

N. Upon written request, the department shall provide a letter of determination stating whether or not more stringent requirements may be imposed on a lot or parcel of land. This determination shall be valid for one year. The department shall issue the determination letter within 10 working days. This letter of determination in no way waives or precludes an applicant's regulatory requirements under this part nor predetermines the regulatory requirements of this part when obtaining a permit.

O. The secretary, or a designated representative, upon presentation of proper credentials and with consent or with an administrative search warrant:

(1) shall have the right of entry to any property on which a permitted or unpermitted on-site liquid waste system regulated by 20.7.3 NMAC exists or is required for the limited purpose of inspecting the liquid waste system or to determine compliance with these regulations or permit conditions; failure to provide reasonable access for the purpose of inspecting a liquid waste system or to determine compliance with these regulations or permit conditions shall be cause for revocation or suspension of a permit;

(2) shall have access to and may copy any record required to be established and maintained by these regulations or permit conditions; failure to provide reasonable access to or copies of any record required to be established and maintained by these regulations or permit conditions shall be cause for revocation or suspension of a permit; and

(3) may obtain any samples required to determine compliance with 20.7.3 NMAC or permit conditions; failure to provide reasonable access to facilities for the purpose of obtaining samples shall be cause for revocation or suspension of a permit.

P. Design flows shall be calculated as follows:

(1) for residential sources, the design flow shall be calculated assuming two (2) persons per bedroom for the first two (2) bedrooms and one (1) person per additional bedroom in a single family dwelling unit and seventy-five (75) gallons per person per day; multiple family

dwelling unit source design flows shall be calculated as the sum of design flows for each single family unit included; and

(2) design flows for nonresidential sources shall be based on Table 201.1 or generally accepted references (such as the uniform plumbing code or the USEPA design manual: *on-site wastewater treatment and disposal systems*); design flows for nonresidential sources also may be based on professional engineering design calculations; total design flows may be determined by the submittal of metered water use or effluent flow data and shall be multiplied by a safety factor of 1.5 for design flow calculations.

Table 201.1: Established liquid waste design flow rates

TYPE OF OCCUPANCY	GALLONS PER DAY
1. Airport, Bus Terminal, Train Station	20 per employee 5 per passenger
2. Beauty & Barber Shop	75 per service chair
3. Bowling alleys (snack bar only)	75 per lane
4. Bed and Breakfast	150 first bedroom 100 each additional bedroom
5. Camps: campground with central comfort station with flush toilets, no showers day camps (no meals served) summer and seasonal	 35 per person 25 per person 15 per person 50 per person
6. Churches (Sanctuary) with kitchen waste	2 per seat 7 per seat
7. Dance hall	5 per person
8. Doctor and Dentist Office	250 per practitioner, 15 per employee
9. Factories: per 8-hour shift no showers with showers cafeteria, add	 25 per employee 35 per employee 5 per employee
10. Food Operations: Restaurants operating 16 hours or less per day Restaurants operating more than 16 hours per day Bar, cocktail lounge add per pool table or video game Carry out only, including caterers add per 8-hour shift Food outlets only add for deli add for bakery add for meat department add per public restroom	 40 per seat 60 per seat 20 per seat 15 each 50 per 100 sq ft floor space 20 per employee 10 per 100 sq ft floor space 40 per 100 sq ft floor space 40 per 100 sq ft floor space 75 per 100 sq ft floor space 200

11. Hotels, Motels, Lodges laundries, lounges and restaurants calculated separately	60 per bed
12. Institutions (resident) Nursing homes Rest homes	75 per person 125 per person 125 per person
13. Laundries self-service (minimum 10 hours/day) commercial	 50 per wash cycle per manufacturer's specifications
14. Offices	20 per employee per 8-hour shift
15. Parks: picnic park - toilets only	 20 per parking space
16. Recreation Vehicles (RV) Park without water hookup with water and sewer hookup RV dump stations	 75 per space 100 per space 50 per RV
17. Schools - staff and office Elementary and Day Care Intermediate and High Boarding, total waste gym and showers, add with cafeteria, add	20 per person 15 per student 20 per student 100 per person 5 per student 3 per student
18. Service stations and convenience stores uni-sex restrooms	400 per toilet 800 per Toilet
19. Stores public restrooms	20 per employee 10 per 100 sq ft. floor
20. Swimming and bathing places, including spas and hot tubs, public	 10 per person
21. Theaters, auditoriums Drive-ins	5 per seat 10 per space
22. Veterinary Clinic add add	250 per practitioner 15 per employee 20 per kennel, stall, or cage

Liquid waste generated by the occupancies above, exceeding the definition of domestic liquid waste, shall require pretreatment prior to utilizing a conventional treatment system.

Q. The minimum liquid capacity of a septic tank shall be determined as follows:

(1) for residential units, the liquid capacity shall be based on the number of bedrooms using Table 201.2; and

(2) for commercial units, the liquid capacity shall be based on the number of plumbing fixture units using Table 201.2; or

(3) if based on estimated design flows pursuant to Paragraph (2) of Subsection P of 20.7.3.201 NMAC, the minimum liquid capacity shall be 2.5 times the design flow, whichever is greater.

Table 201.2: Capacity of Septic Tanks

Single family dwellings, number of bedrooms	Other uses maximum fixture units*	Minimum septic tank capacity in gallons served
1	10	750
2 - 3	12	1000
4	15	1200
5 - 6	20	1500
7 - 9	27	2000
	29	2250
	32	2500
	35	2750

* 100 fixture units or less are equal to 31.1 gallons per fixture unit.

R. Waste from a water softener unit shall comply with the following.

(1) Softener waste may be discharged to a conventional treatment unit. If the waste is not discharged to the treatment unit, the waste may be disposed in accordance with other applicable regulations.

(2) For new construction utilizing an advanced treatment system, the softener waste shall not be discharged to the advanced treatment unit. The softener waste shall bypass the advanced treatment unit and discharge directly to the drainfield or be disposed of in some manner acceptable to the department and meets all other state and local regulations.

(3) If a water softener unit is installed at an existing residential or commercial unit utilizing an advanced treatment unit:

(a) the current liquid waste permit shall be amended to reflect the installation;

(b) a written notice shall be submitted to the maintenance service provider of the advanced treatment unit; and

(c) either a demand-initiated regeneration control device (DIR device) shall be installed or the softener waste shall bypass the advanced treatment unit.

(4) If an advanced treatment unit is to be installed at an existing residential or commercial unit with an existing water softener, the installation shall be done in accordance with the permit.

[20.7.3.201 NMAC - Rp, 20.7.3 NMAC, 201, 301, 302, 401, 402, 9/1/05; A, 4/1/07]

20.7.3.202 PROCEDURES; MODIFICATION OF EXISTING SYSTEMS:

A. Prior to the modification of an existing on-site liquid waste system, either permitted or unpermitted, a permit application must be submitted in accordance with 20.7.3.401-405 NMAC. The portion of the system requiring modification shall be in accordance with 20.7.3 NMAC except as noted in Subsection C of 20.7.3.202 NMAC below.

B. Replacement components for on-site liquid waste systems shall be of materials approved the department.

C. On-site liquid waste systems modified after the effective date of this regulation:

(1) shall meet the lot size requirements of the regulations in effect at the time of the initial installation or most recent permitted modification; and

(2) the total lot flow shall be increased only if all current standards and requirements are met pursuant to 20.7.3 NMAC. More stringent requirements may be required pursuant to Subsection M of 20.7.3.201 NMAC.

D. The septic tank need not be replaced as part of the modification if the tank is structurally sound, constructed of approved materials, meet the requirements of 20.7.3.501-502 NMAC, and if the existing tank has a liquid capacity within one tank size of the capacity required by Subsection Q of 20.7.3.201 NMAC. In addition, the tank shall be pumped and the inlet and outlet baffles or sanitary tees checked and repaired or replaced, if needed. An approved effluent filter shall be installed in accordance with Subsection C of 20.7.3.502 NMAC.

E. Upon the issuance of the permit to modify and the subsequent inspection and approval of the modification, a previously unpermitted system shall be considered permitted and authorized to operate.

[20.7.3.202 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.203 PROCEDURES; CONSTRUCTION INSPECTIONS AND TESTING:

A. The department may perform site inspections prior to making a decision on a permit application or variance petition, during construction or modification of the system and after completion of the system. The department may require test holes to be excavated and documentation to be provided for purposes of determining soil types, depth of soil and water table depths. In areas where soil conditions are well characterized and groundwater depth is documented, test holes may be waived. The department may collect samples of soil, liquid waste and water, including water from wells, to determine compliance with 20.7.3 NMAC.

B. Upon granting the permit or variance application, if the department determines an inspection is necessary, the department shall indicate the point in the construction process where the first construction inspection is to be scheduled or in accordance with Subparagraph A of this section.

(1) The person doing the work authorized by the permit shall notify the department to schedule an inspection, orally or in writing, a minimum of 2 working days prior to the inspection. The department may assess a re-inspection fee if the work is not ready for inspection at the time of the scheduled inspection. In the event the inspection is not conducted within one hour after the appointed time of inspection, the contractor shall take photographs that accurately identify the site and features of the installation and proceed with the installation. Copies of such photographs shall be submitted to the department.

(2) All homeowner installed systems shall be inspected by the department.

(3) If an inspection results in the issuance of a notice of non-approval, a re-inspection shall be required. The person shall notify the department as indicated above.

C. System components shall be properly identified as to manufacturer and shall meet all specifications specified in 20.7.3 NMAC.

D. The department may require testing to verify watertight construction and initial functioning of any liquid waste system.

(1) Liquid waste treatment units, pump stations or pump chambers shall be considered watertight by successfully completing one of the following testing procedures.

(a) Water pressure testing: Seal the unit, fill with water and let stand for 24 hours. Refill the unit. The unit is approved if the water level is held for 60 minutes.

(b) Vacuum testing: Seal the unit and apply a vacuum to 2 inches (50mm) of mercury. The unit is approved if the vacuum is held for 60 minutes.

(2) The department may require a flow test be performed through the system to the point of effluent disposal. All lines and components shall be watertight. Capacities, required air space,and fittings shall meet the requirements of 20.7.3 NMAC.

(3) The department may require operational testing of advanced treatment components to verify initial functioning.

[20.7.3.203 NMAC - Rp, 20.7.3 NMAC, 204, 408, 9/1/05; A, 4/1/07]

20.7.3.204 through 20.7.3.300 [RESERVED]

20.7.3.301 STANDARDS; LOT SIZE REQUIREMENTS:

A. The requirements of this section apply to all conventional treatment systems that discharge to the soil. Compliance with the requirements of this section shall be based on the total design flow for the lot. Water conservation devices or demonstrated actual flows shall not be used to reduce the requirements of this section. For the purposes of 20.7.3 NMAC, lot sizes shall be calculated to the nearest hundredth (0.01) acre.

B. The date of record for a lot shall be considered to be either:

(1) the date of legal recording in the county clerk's office or validation by other means associated with the most recent change in lot size or boundaries; or

(2) for those lots in subdivisions having received final approval from governments having jurisdiction therein prior to February 1, 1990, such date of record shall be two and one-half (2 1/2) years from the date of final government approval or July 1, 1992, whichever occurs first.

C. A conventional treatment system shall not be installed on a lot sized smaller than 0.75 acre, where there is not an established on-site liquid waste system, except as otherwise provided in Subsection F of 20.7.3.301 NMAC. The size of a lot shall be the total area of the lot less any area that is subject to a roadway, roadway easement and liquid waste disposal easements granted to or by another lot. The design flow for a conventional treatment system shall not exceed 500 gallons per day per acre. For total design flows that exceed the allowable flow or for lots that do not meet the minimum lot size, the total nitrogen discharged to the lot shall be reduced in accordance with Subsection B of 20.7.3.603 NMAC.

D. On-site liquid waste systems installed prior to the effective date of 20.7.3 NMAC shall meet the lot size requirements of the regulations in effect at the time of their initial installation or if there has been a permitted modification, the regulations in effect at the time of the most recent prior permitted modification.

E. Table 301.1 lists the minimum lot sizes required for typical flow rates for conventional treatment systems for lots with a date of record of February 1, 1990 or later.

Table 301.1

TOTAL DESIGN FLOW (gallons per day)	MINIMUM LOT SIZE (acres)
375 or less	0.75
450	0.90
600	1.20
750	1.50
1125	2.25
1500	3.00

1875	3.75
2000	4.00

F. On-site liquid waste systems installed after the effective date of these regulations, on lots with dates of record prior to February 1, 1990, without established on-site liquid waste systems, shall conform to the following:

(1) for lots less than 0.5 acre, no conventional systems shall be authorized;

(2) for lots 0.5 acre to 0.75 acre and 100 feet or less to groundwater or within a 200 foot radius of a public water supply well, no conventional systems shall be authorized;

(3) for lots 0.5 acre to 0.75 acre with a private well, not within a 200 foot radius of a public supply well and 101 feet to 600 feet to groundwater, the total design flow shall not exceed 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater, for 3 years after the effective date of these regulations;

(4) for lots 0.5 acre to 0.75 acre on a public water system, not within a 200 foot radius of a public supply well and 101 feet to 600 feet to groundwater, the total design flow shall not exceed 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater, for 5 years after the effective date of these regulations;

(5) for lots 0.5 acre or larger and greater than 600 feet to groundwater, 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater is allowed; and

(6) once the extended time periods in Paragraphs (3) and (4) of this subsection have expired, then the lot size/flow limitation in Subsection C of 20.7.3.301. NMAC shall apply to new installations.

G. The following Table 301.2 summarizes the minimum lot size requirements, in acres, and permissible design flows in effect prior to February 1, 1990 and is for the purpose of determining the requirements existing at the time of initial installation or most recent permitted modification.

Table 301.2

	RECORD DATE								
	01/01/60 to 11/01/73	11/01/73 to 09/07/79*		09/07/79 to 03/01/80		03/01/80 to 11/09/85		11/09/85 to 02/01/90	
	Minimum Lot Size	Soil Group **	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size
OFF-SITE WATER**	0.25***	A	0.50	0-1000	0.50	0-375	0.33	0-375	0.33
		B	0.75	1000-1500	1.00	376-1000	0.50	376-750	0.50
		C	1.00	1500-2000	1.25	1000-1500	1.00	750-1125	1.00
		D	****			1501-2000	1.25	1126-1500	1.25

								1501-2000	1.75
ON-SITE WATER**	0.50***	A	0.75	0-1000	0.75	0-1000	0.75	0-375	0.75
		B	1.00	1000-1500	1.25	1000-1500	1.25	376-750	1.50
		C	1.25	1500-2000	1.70	1501-2000	1.70	750-1125	2.00
		D	****					1126-1500	2.75
								1501-2000	3.50

(1) * The maximum total design flow was 1,000 gpd for the lot sizes shown.

(2) ** See Subsection H of 20.7.3.301 NMAC.

(3) *** These requirements applied to lots in subdivisions that were required at the time of subdivision to obtain state health department review and approval.

(4) **** No on-site liquid waste disposal to soil allowed.

(5) NOTE: Roadways were first excluded from figuring lot sizes as of 11/09/85.

H. The following Table 301.3 lists the soil types for lot size determinations for the period November 1, 1973 to September 7, 1979: The minimum lot size required for the location of an individual liquid waste disposal system is determined by the most limiting soil group under which any soil characteristic falls.

Table 301.3

SOIL CHARACTERISTICS	A Slight Limitations	B Slight Limitations	C Moderate Limitations	D Severe Limitations
1. SOIL DEPTH (depth to bedrock, in feet)	More than 6 and	More than 6 and	4 - 6 or	Less than 4 or
2. PERCOLATION RATE (rate of percolation of water into soil in minutes per inch)	0 - 15 and	16 - 30 and	31 - 60 or	More than 60 or
3. SEASONAL WATER TABLE (depth to shallowest water table during the year, in feet)	More than 12 and	More than 12 and	4 - 12 or	Less than 4 or
4. SLOPE (incline of the land surface, in percent)	0 - 8 and	0 - 8 and	8 - 25 or	More than 25 or

5. FLOODING POTENTIAL (overflow frequency, in years)	None	None	No more than 1 in 25	More than 1 in 25

I. If the size or boundaries of a lot with an existing on-site liquid waste system are changed so that the total design flow for the lot exceeds the total design flow limitation provided for in Subsection C of 20.7.3.301 NMAC, the permit for the system shall be void.

J. If the size or boundaries of a lot with an existing on-site liquid waste system are changed so that the total design flow for the lot does not exceed the total design flow limitation provided for in Subsection C of 20.7.3.301 NMAC, an amendment to the existing permit shall be submitted.

[20.7.3.301 NMAC - Rp, 20.7.3.302 NMAC, 9/1/05; A, 4/1/07]

20.7.3.302 STANDARDS; SETBACK REQUIREMENTS:

A. On-site liquid waste systems shall be located to meet setback distances, in feet, specified in the following Table 302.1. Setback distances apply to any part of the on-site liquid waste system and its designated replacement area.

Table 302.1: Minimum setback and clearance requirements

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	--	10 ft.	10 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 in excess of 1 foot below perforated pipe.
(5) ***** May be 5 feet when Schedule 40 PVC/DWV pipe is used.
(6) ******Or applicable plumbing code.

B. Setback distances to watercourses, canals and arroyos shall be measured from the edge of the seasonal high water flow to the on-site liquid waste system component. Setback distances to artificially controlled lakes or reservoirs shall be measured from the closest projected shoreline at the maximum controlled water level.

[20.7.3.302 NMAC - Rp, 20.7.3.303 NMAC, 9/1/05; A, 4/1/07]

20.7.3.303 STANDARDS; CLEARANCE REQUIREMENTS:

A. Seasonal high ground water levels and seasonal high water flows shall be determined by the department either by direct observation, by the presence of mottling in the soil profile, by reliance upon the findings of a qualified professional or upon published scientific material, well records or other sources acceptable to the department. The department may adjust the measured water table to compensate for factors such as season, drought, irrigation or flooding. Compliance with seasonal high ground water table and seasonal high water flow clearances in this section shall be based on the best-documented evidence available to the department at the time of installation or modification.

B. No conventional on-site liquid waste system shall discharge liquid waste into the soil where the vertical clearance from the bottom of the absorption area to seasonal high ground water table, impervious formation or other limiting layer is less than four (4) feet of suitable soil. A reduction in this clearance may be allowed with appropriate advanced treatment or alternative disposal.

C. Unlined privy pits shall provide a clearance of no less than four (4) feet of suitable soil from the bottom of the excavation to the seasonal high ground water table, the seasonal high water flow, impervious formation or other limiting layer.

[20.7.3.303 NMAC - Rp, 20.7.3.304 NMAC, 9/1/05]

20.7.3.304 STANDARDS; PROHIBITIONS:

A. No person shall introduce into an on-site liquid waste system household hazardous wastes, solvents, fertilizers, livestock wastes or other materials of a composition or concentration not generally considered liquid waste as defined in 20.7.3 NMAC.

B. Liquid waste treatment additives shall not be used as a means to reduce the frequency of proper maintenance and removal of septage from a treatment unit.

[20.7.3.304 NMAC - Rp, 20.7.3 NMAC, 308, 309, 9/1/05]

20.7.3.305 STANDARDS; WASTE INTERCEPTORS:

A. When liquid wastes are discharged containing excessive amounts of grease, garbage, flammable wastes, sand or other ingredients that may affect the operation of an onsite liquid waste system, an interceptor for such wastes shall be installed in-line prior to the liquid waste treatment unit.

B. Installation of such interceptors shall comply with the uniform plumbing code.

C. Interceptors shall be installed in locations that meet minimum setback and clearance requirements of Table 303.1.

D. Waste interceptors shall be maintained in accordance with manufacturer's specifications and require a maintenance contract to be in effect at all times.

[20.7.3.305 NMAC - Rp, 20.7.3.407 NMAC, 9/1/05]

20.7.3.306 STANDARDS; SEPTAGE: Disposal of septage shall not cause a hazard to public health nor degrade a body of water. Transport and disposal of septage shall be in conformance with applicable federal, state and local regulations.

[20.7.3.306 NMAC - Rp, 20.7.3.307 NMAC, 9/1/05]

20.7.3.307 STANDARDS; ABANDONED SEWERS AND ON-SITE LIQUID WASTE SYSTEMS:

A. Every abandoned building sewer, or part thereof, shall be plugged or capped within five (5) feet of the property line using a cap or plug prescribed by the uniform plumbing code.

B. Every cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit that has been abandoned or has otherwise been discontinued from further use or to which no waste or building sewer from a plumbing fixture is connected shall have the liquid waste pumped there from and properly disposed. The bottom of the unit shall be opened or ruptured, or the entire unit collapsed so as to prevent the unit from retaining water. The unit shall be completely filled with earth, sand, gravel, concrete or other approved material.

C. The top cover or arch over the cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit shall be removed or collapsed before filling and the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection or authorization by the department. After such inspection or authorization, the cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit shall be filled to the level of the top of the ground.

D. Where on-site treatment systems are abandoned consequent to connecting any premises with a public sewer, the permittee making the connection shall fill all abandoned treatment units as required by the department within 30 days from the time of connection.

[20.7.3.307 NMAC - Rp, 20.7.3.410 NMAC, 9/1/05]

20.7.3.308 through 20.7.3.400 [RESERVED]

20.7.3.401 PERMITTING; GENERAL REQUIREMENTS:

A. No person shall install or have installed a new on-site liquid waste system or modify or have modified an existing on-site liquid waste system, unless that person obtains a permit issued by the department prior to construction of such installation or modification. Failure to obtain the required permit may result in the initiation of enforcement actions by the department.

B. No person shall construct or modify a residential or commercial unit on, or transport a residential or commercial unit onto, a lot for which an on-site liquid waste system is required unless the department has issued an on-site liquid waste system permit prior to such construction, modification or transportation.

C. No person shall construct, install or modify an on-site liquid waste system unless that person holds a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division, except that a qualified homeowner may install or modify permitted septic tanks and conventional trench or bed disposal fields. ~~Once the department has developed a certification program pursuant to 20.7.3.904 NMAC, the contractor shall comply with the certification requirements of that section prior to constructing, installing or modifying any on-site liquid waste system.~~ Once the department has developed a homeowner certification program ~~pursuant to 20.7.3.904 NMAC, a homeowner shall comply with the homeowner certification requirements prior to constructing, installing or modifying an on-site liquid waste system.~~ A qualified homeowner who self-installs a system shall not compensate any person to perform any phase of the system construction, unless that person holds a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division ~~and has complied~~ with the department's certification requirements. Obtaining a permit from the department for the installation or modification of an on-site liquid waste system does not relieve any person from the responsibility of obtaining any other approval, license or permit required by state, city or county regulations or ordinances or other requirements of state or federal laws.

D. A permit is not required for graywater discharges or for systems designed for the discharge of graywater that meet the requirements of 20.7.3.810 NMAC.

E. Any person seeking a permit shall do so by submitting an application to the field office of the department having jurisdiction for the area where the system is to be installed or modified. The application shall be:

(1) made on a form provided by the department;

(2) accompanied by the recorded deed or other recorded description and such other relevant information as the department may reasonably require to establish lot size, boundaries, date of record and ownership; and

(3) signed by the applicant or their authorized representative.

F. The department shall require complete and accurate information before a permit is issued for an on-site liquid waste system.

G. The department shall deny the application if the proposed system will not meet the requirements of 20.7.3 NMAC.

H. The department shall maintain a file of all permits issued and applications denied. The file shall be open for public inspection.

I. All systems shall be installed, operated and maintained in accordance with the permit and applicable regulations.

J. Unpermitted conventional systems installed prior to February 1, 2002 may be issued a certificate of registration for continued operation if:

(1) the treatment unit is pumped by a septage pumper hired by the system owner, ~~and~~ inspected by the ~~utilizing a~~ department, ~~approved form~~

(2) the liquid waste system meets the requirements in effect at the time of the initial installation based on a non-intrusive inspection;

(~~2~~3) the disposal system appears to be functioning properly; and

(~~3~~4) the appropriate permit fee is paid for the system installed.

K. Unpermitted conventional systems installed on or after February 1, 2002 may be permitted if:

(1) the treatment unit and the disposal system are~~is~~ adequately exposed to allow full inspection by the department ~~is sufficiently exposed~~ to determine all relevant aspects of

construction and materials, including, but not limited to: soil type; pipe size, type and material; proper placement of aggregate and cover; and proper trench size, slope and spacing;

(2) the on-site liquid waste system is determined, upon inspection by the department, to meet all requirements of 20.7.3 NMAC; and

(3) the appropriate permit fee is paid; and

(4) at the discretion of the department, an administrative penalty is paid in accordance with Environmental Improvement Act, Chapter 74, Article 1 NMSA 1978.

L. If the department finds that specific requirements in addition to or more stringent than those specifically provided in 20.7.3 NMAC are necessary to prevent a hazard to public health or the degradation of a body of water, the department shall issue permit conditions with more stringent requirements or additional specific requirements. Such additional or more stringent requirements may apply to system design, siting, construction, inspection, operation and monitoring.

M. The installation or modification of an on-site liquid waste system shall be in accordance with the permit and all regulatory requirements of 20.7.3 NMAC. Any change from the permitted installation or modification, including a change of contractor, must receive department approval prior to implementation. An amendment to the permit shall be submitted within 7 days of the completion of the installation.

N. No person shall operate or use an on-site liquid waste system until the department has granted final approval of the system after installation or modification of the system is completed. No person shall occupy a newly constructed or transported dwelling for which an on-site liquid waste system is required until the department has granted such final approval and, if applicable, until the governmental body with authority to regulate construction has granted an occupancy permit. The department shall not grant final approval if the system as installed or modified does not meet the requirements of 20.7.3 NMAC.

O. The department may cancel a permit if the installation or modification of the on-site liquid waste system has not been completed within one (1) year after issuance or if the department determines that material information in the application is false, incomplete or inaccurate and that the correct information would have resulted in the department denying the original application. If a permit is canceled, the department shall notify the permittee of the decision in writing and the reason for cancellation and appropriate regulations cited.

[20.7.3.401 NMAC - Rp, 20.7.3.201 NMAC, 9/1/05; A, 4/1/07]

20.7.3.402 PERMITTING; CONVENTIONAL TREATMENT AND DISPOSAL SYSTEMS:

A. For liquid waste systems utilizing conventional treatment and conventional disposal, the department may require the following information to be included with the application.

(1) A detailed site plan, completely dimensioned, showing direction and approximate slope of surface; location of all present or proposed retaining walls; arroyos, canals, irrigation or drainage channels; water supply lines, wells or other water sources; other on-site liquid waste systems; paved areas, roadways and structures; location of the proposed liquid waste system and replacement area with relation to lot lines and structures; and to all sources of water supply located within two-hundred (200) feet.

(2) Sufficient details of construction, materials and components necessary to assure compliance with the requirements of 20.7.3 NMAC.

(3) A detailed log of soil formations and ground water level as determined by soil borings or a test hole(s) dug in close proximity to any proposed seepage pit or disposal field.

(4) A set of floor plans or verification of the total flow for the structure(s) served by the liquid waste system.

(5) Any additional information that may be necessary to demonstrate that the permit will not create a hazard to public health or degrade a body of water.

~~B. If the department finds that specific requirements in addition to or more stringent than those specifically provided in 20.7.3 NMAC are necessary to prevent a hazard to public health or the degradation of a body of water, the department shall issue permit conditions with more stringent requirements or additional specific requirements. Such additional or more stringent requirements may apply to system design, siting, construction, inspection, operation and monitoring.~~

~~C. The installation or modification of an on-site liquid waste system shall be in accordance with the permit and all regulatory requirements of 20.7.3 NMAC. Any change from the permitted installation or modification, including a change of contractor, must receive department approval prior to implementation. An amendment to the permit shall be submitted within 7 days of the completion of the installation.~~

~~D. No person shall operate or use an on-site liquid waste system until the department has granted final approval of the system after installation or modification of the system is completed. No person shall occupy a newly constructed or transported dwelling for which an on-site liquid waste system is required until the department has granted such final approval and, if applicable, until the governmental body with authority to regulate construction has granted an occupancy permit. The department shall not grant final approval if the system as installed or modified does not meet the requirements of 20.7.3 NMAC.~~

~~E. The department may cancel a permit if the installation or modification of the on-site liquid waste system has not been completed within one (1) year after issuance or if the department determines that material information in the application is false, incomplete or inaccurate and that the correct information would have resulted in the department denying the original application. If a permit is canceled, the department shall notify the permittee of the decision in writing and the reason for cancellation and appropriate regulations cited.~~

BF. Except as otherwise provided in Subsection G of this section, the department shall, within ten (10) working days after receipt of the completed application, grant the permit, grant the permit subject to conditions or deny the permit and shall notify the applicant of the action taken. Within five working days, the department shall determine if a permit application is administratively complete. The department shall notify the applicant if the application is administratively incomplete. The determination that an application is administratively complete does not mean that the proposed system meets the requirements of 20.7.3 NMAC.

CG. If the department's initial review of the application indicates that the imposition of more stringent requirements may be necessary pursuant to Subsection M of 20.7.3.201 NMAC or Subsection B of 20.7.3.702 NMAC, the department may extend the time for the review of the application until twenty (20) working days after receipt of the completed application provided that the department shall notify the applicant of such extension within ten (10) working days after receipt of the completed application.

DH. When the permit is granted subject to conditions, denied or more stringent conditions applied, the reason for the action shall refer to the appropriate regulation(s) and be given in writing.

[20.7.3.402 NMAC - Rp, 20.7.3.201 NMAC, 9/1/05]

20.7.3.403 PERMITTING; ADVANCED TREATMENT OR ALTERNATIVE DISPOSAL:

A. An application for a permit proposing advanced treatment (with conventional or alternative disposal) or alternative disposal (with conventional treatment) may be submitted.

B. Applications shall include the information required for a conventional treatment or disposal system, and:

(1) for applications proposing advanced treatment with either conventional or alternative disposal:

(a) the applicant shall demonstrate that the system has been approved by the department and shall include operation and maintenance information, monitoring plans and maintenance agreements;

(b) the applicant must demonstrate the applicability and effectiveness of the technology on the site where it is to be used;

(c) a copy of all signed maintenance contracts between the property owner and a certified maintenance service provider shall be attached to the application;

(d) the property owner shall have all maintenance contracts in effect for the duration of the permit; and

(e) the property owner shall provide to the department copies of all maintenance contracts within 30 days of contract issuance or renewal; and

(2) for applications proposing alternative disposal with conventional treatment, the applicant shall include details of design, sizing, construction and operation. Such disposal systems include, but are not limited to, mounds, evapotranspiration, seepage pits, pressure dosed systems, alternating leach fields, non discharging constructed wetlands, non gravity systems and approved surface applications.

C. For applications proposing advanced treatment or alternative disposal, the department shall, within twenty (20) working days after receipt of the completed application, grant the permit, grant the permit subject to conditions or deny the permit and shall notify the applicant of the action taken.

D. When the permit is granted subject to conditions or the application denied, the reason for the action shall refer to the appropriate regulation and be given in writing.

E. For advanced treatment systems, the authorization to operate the system shall be valid until a change of ownership of the system occurs. At the time of transfer of ownership, the new owner shall submit an amendment of permit updating the ownership change and also provide the department a copy of the valid maintenance contract in the name of the new owner.

[20.7.3.403 NMAC - N, 9/1/05, A, 4/1/07]

20.7.3.404 PERMITTING; EXPERIMENTAL SYSTEMS:

A. The department may issue a permit, on an individual basis, for the installation of an experimental on-site liquid waste system. The permit applicant must demonstrate that the proposed system, by itself or in combination with other on-site liquid waste systems, will neither cause a hazard to public health, nor degrade a body of water and that the proposed system will provide a level of treatment at least as effective as that provided by on-site liquid waste systems, except privies and holding tanks, that meet the requirements of 20.7.3 NMAC.

B. Prior to the approval of a permit for an experimental on-site liquid waste system, the experimental system shall be reviewed by the technical advisory committee pursuant to 20.7.3.905 NMAC.

C. A field demonstration, which meets the following requirements, shall be required for a proposed experimental system.

(1) Conditions for installation, operation, maintenance and monitoring at the proposed demonstration site shall be reviewed and approved by the department.

(2) On-site testing and evaluation, as required by the department and paid for by the permit applicant, shall be performed for a period specified by the technical advisory committee. The results of the evaluation period shall be forwarded to the technical advisory committee for review and further action.

(3) A contingency plan shall be included to provide liquid waste treatment that meets the requirements of 20.7.3 NMAC if the experimental system fails to meet the requirements of 20.7.3 NMAC.

(4) A copy of a signed maintenance contract between the property owners and a certified maintenance service provider shall be attached. The property owner shall have a maintenance contract in effect for the duration of the permit. The property owner shall provide to the department copies of all maintenance contracts required to be in effect within 30 days of contract issuance or renewal.

[20.7.3.404 NMAC - Rp, 20.7.3.306 NMAC, 9/1/05]

20.7.3.405 PERMITTING; VARIANCES:

A. Any person seeking a variance from the requirements contained in 20.7.3 NMAC shall do so by filing a written petition with the field office of the department having jurisdiction for the area where the system is to be installed.

B. The petition shall be made on a form provided by the department, signed by the petitioner or an authorized representative and accompanied by relevant documents or materials that supports the petitioner's request for a variance. The petitioner shall give notice to all landowners sharing a common boundary and within 100 feet when sharing a common right-of-way. If no property boundary is within 1000 feet of the system, notification is not required, except as otherwise provided in this part. In addition, all parties sharing a private domestic well located on the lot where the variance is proposed shall be notified. Said notice shall include the nature of the variance petition, the date of submission of the petition to the department, the address of the department field office to which the petition is being submitted and the time frame for department action as provided in Subsection D of 20.7.3.405 NMAC below.

C. Upon review of the petition, the department may require the submittal of other relevant information to provide reasonable assurance that the conditions set forth in Paragraphs (1) and (2) of Subsection E of 20.7.3.405 NMAC are met.

D. The department shall, after a minimum of ten (10) but not more than twenty (20) working days following receipt of the completed petition, grant the variance, grant the variance subject to conditions or deny the variance and shall so notify the applicant and any other person making a written submission concerning the petition. The reason for the department's action shall be provided in writing and the appropriate regulations cited.

E. The department shall deny the variance petition unless the petitioner establishes by clear and convincing evidence that:

(1) the proposed on-site liquid waste system will, by itself or in combination with other on-site liquid waste systems or other discharges subject to 20.6.2.3000 through 20.6.2.3114 NMAC, neither cause a hazard to public health or degrade any body of water; and

(2) granting the variance will result in public health and environmental protection equal to or greater than the minimum protection provided by the varied requirement.

F. The department shall maintain a file of all variances granted and denied. The file shall be open for public inspection.

[20.7.3.405 NMAC - Rp, 20.7.3.202 NMAC, 9/1/05; A, 4/1/07]

20.7.3.406 PERMITTING; APPEALS:

A. Any affected person who is dissatisfied with action taken by the department on a permit application or variance petition may appeal to the secretary. The request must be made in writing to the secretary within fifteen (15) working days after notice of the department's action has been issued. Unless an appeal is received by the secretary within fifteen (15) working days after notice to the applicant or petitioner of the department's action, the decision of the department shall be final.

B. If an appeal is received within the fifteen (15) working day time limit, the secretary shall hold a hearing within fifteen (15) working days after receipt of the request. The secretary shall notify the person who requested the hearing of the date, time and place of the hearing by certified mail. If the appeal is on a variance petition, the secretary shall also notify all persons involved under Subsection B of 20.7.3.405 NMAC of the hearing date, time and place of the hearing by certified mail.

C. In the appeal hearing, the burden of proof is on the person who requested the hearing. Where the department requires more stringent requirements pursuant to Subsection M of 20.7.3 NMAC, the burden of proof of the necessity for the more stringent requirements shall be upon the department.

D. Appeal hearings shall be held at a place designated by the secretary in the area where the proposed on-site liquid waste system is to be located, unless other mutually agreed upon arrangements are made. The secretary may designate a person to conduct the hearing and make a final decision or make recommendations for a final decision. The secretary's hearing notice shall indicate who will conduct the hearing and make the final decision.

E. Upon request, the hearing shall be recorded. The person who requests the recording shall pay recording costs.

F. In appeal hearings, the rules governing civil procedure and evidence in district court do not apply. Hearings shall be conducted so that all relevant views, arguments and testimony are amply and fairly presented without undue repetition. The secretary shall allow department staff and the hearing requestor to call and examine witnesses, to submit written and oral evidence and arguments, to introduce exhibits and to cross-examine persons who testify. All testimony shall be taken under oath. At the end of the hearing, the secretary shall decide and announce if the hearing record will remain open and for how long and for what reason it will be left open.

G. Based upon the evidence presented at the hearing, the secretary shall sustain, modify or reverse the action of the department. The secretary's decision shall be by written order within fifteen (15) working days following the close of the hearing record. The decision shall state the reasons therefore and shall be sent by certified mail to the hearing requestor and any

other affected person who requests notice. Appeals from the secretary's final decision are by Rule 1-075 NMRA.
[20.7.3.406 NMAC - Rp, 20.7.3.203 NMAC, 9/1/05]

20.7.3.407 through 20.7.3.500 [RESERVED]

20.7.3.501 DESIGN; LIQUID WASTE TREATMENT UNITS; GENERAL:

A. Plans for septic tanks shall be submitted to the department for approval and certification. Such plans shall show all dimensions, reinforcement, structural calculations and such other pertinent data as may be required by the department. Plans for advanced treatment units shall be submitted to the department for review by the technical advisory committee pursuant to 20.7.3.905 NMAC. Plans for advanced treatment units shall meet the requirements set forth by the technical advisory committee.

B. All treatment units and tanks, regardless of material or method of construction and unless otherwise specified in 20.7.3 NMAC, shall:

(1) be designed and constructed to withstand all reasonable lateral earth pressures under saturated soil conditions with the tank empty;

(2) have a minimum live load at the surface of 300 pounds per square foot with twelve (12) inches of cover unless heavier loads are expected;

(3) not be subject to excessive corrosion or decay;

(4) have the manufacturer's name, New Mexico registration number, year of construction and tank capacity in gallons permanently displayed on the tank above the outlet pipe;

(5) be watertight;

(6) not be constructed or manufactured on site, in the ground, when saturated soil conditions during construction are closer than three (3) inches to the bottom of the excavation;

(7) be protected against flotation under high ground water conditions and for units installed in floodplains;

(8) be installed so that they are easily locatable and accessible; and

(9) be approved by the international association of plumbing and mechanical officials (IAPMO); or meet IAPMO minimum standards as demonstrated to the department by approved laboratory testing; or meet all requirements of Sections 20.7.3.501 and 502 NMAC; or be recommended by the technical advisory committee and approved by the department.

C. Treatment units may be constructed of the following materials:

(1) precast reinforced concrete;

(2) poured-in-place concrete;

(3) fiberglass;

(4) polyethylene; or

(5) other materials as approved in writing by the department.

D. Metal, wooden, concrete block and homeowner built tanks are prohibited.

E. A secure lid shall consist of one or more of the following:

(1) a padlock;

(2) a twist lock cover requiring special tools for removal;

(3) covers weighing 58 pounds or more, net weight;

(4) a hinge and hasp mechanism that uses stainless steel or other corrosion resistant fasteners to fasten the hinge and hasp to the lid and tank for fiberglass, metal or plastic lids; or

(5) other mechanisms approved by the department.

F. Wherever vehicular traffic is anticipated to cross over the liquid waste treatment unit, pump station or pump chamber, the unit shall be designed by a professional engineer to withstand the anticipated traffic loading.

G. All solid wall pipe connections, fittings and penetrations shall be watertight.

H. Each tank shall be structurally designed to withstand all anticipated earth or other loads. All septic tank covers shall be capable of supporting an earth load of not less than three hundred (300) pounds per square foot when the maximum fill coverage does not exceed three (3) feet.

I. Fiberglass or reinforced plastic treatment units shall be certified to IAPMO standards. Fiberglass or plastic tanks shall be installed according to the manufacturer's instructions. A copy of the manufacturer's installation instructions shall be available for inspection by the department at the installation site.

J. Concrete liquid waste treatment units.

(1) Minimum concrete thickness.

(a) Walls: Two and one-half (2 1/2) inches in thickness.

(b) Floors: Three (3) inches in thickness.

(c) Covers: Three (3) inches in thickness.

(2) Floors shall be an integral part of the tank.

(3) Where sections are used, tongue and groove joints or keyways shall be used and shall be sealed with an approved sealer and shall be watertight.

(4) Poured-in-place tanks shall be designed and certified by a professional engineer.

(5) All concrete liquid waste treatment units, except those approved for use utilizing concrete meeting type V specifications, shall be protected from corrosion by coating internally with an approved bituminous coating or by other acceptable means. The coating shall cover all exposed concrete and shall extend to at least 6 inches below the waterline.

(6) Treatment unit construction materials shall meet the following minimum specifications:

(a) concrete strength - 3500 psi @ 28 days, density 140 PCF;

(b) cement Portland type II or V per ASTM C150-04ae1;

(c) admixtures per ASTM C233-04; and

(d) reinforcing per ASTM A615 for wire fabric, grade 40/60 R'd or equivalent.

(7) Be installed level on undisturbed or compacted soil.

[20.7.3.501 NMAC - Rp, 20.7.3.402 NMAC, 9/1/05; A, 4/1/07]

20.7.3.502 DESIGN; CONVENTIONAL TREATMENT UNITS; CONSTRUCTION STANDARDS:

A. All conventional treatment units, regardless of material or method of construction and unless otherwise specified in this part, shall be designed to produce a clarified effluent and shall provide adequate space for sludge and scum accumulations based on a minimum hydraulic retention time of 24 hours at maximum sludge depth and scum accumulation.

B. Septic tanks shall have a minimum of two (2) compartments. The inlet compartment of a septic tank shall be two-thirds (2/3) of the total liquid capacity of the tank, but not less than five-hundred (500) gallons liquid capacity, and shall be at least three (3) feet in width and five (5) feet in length. Liquid depth shall be not less than two (2) feet and six (6) inches nor more than six (6) feet. The second compartment of a septic tank shall have a liquid capacity of one-third (1/3) of the total capacity of such tank. In septic tanks having over fifteen hundred (1500) gallons capacity, the second compartment may not be less than three (3) feet in length.

C. Multiple tanks installed in series may be allowed with department approval provided the total tank volume is at least 2.5 times the total design flow. Minimum tank sizes are as follows:

(1) for flows up to 1000 gpd, the capacity of each tank must be at a minimum 900 gallons; and

(2) for flows between 1000 and 2000 gpd, the capacity of each tank must be a minimum of 1200 gallons.

D. Access to each septic tank shall be provided by at least two access openings, each of which shall be at least twenty (20) inches in minimum dimension. One access opening shall be placed over the inlet and one access opening shall be placed over the outlet. Whenever a first compartment exceeds twelve (12) feet in length, an additional access opening shall be provided over the baffle wall. Each access opening shall be extended to the surface of the ground with a secure lid. These extensions shall be twenty-four (24) inches in diameter for depths of 0-3 feet and for depths greater than 3 feet shall be at least 30 inches in diameter with an approved lid that conforms to Subsection E of 20.7.3.501 NMAC. If the extensions are made of concrete, they shall be coated with a coating approved by the department. "Wet-or-dry" coatings and mastics, or other water-based materials are not acceptable. Materials for the extensions shall be approved by the department.

E. The inlet and outlet pipe openings shall be not less in size than the connecting sewer pipe and shall have a watertight seal approved by the department. The vertical leg of round inlet and outlet fittings shall not be less in size than the connecting sewer pipe nor less than four (4) inches. A baffle type fitting shall have the equivalent cross-sectional area of the connecting sewer pipe and not less than a four (4) inch horizontal dimension when measured at the inlet and outlet pipe inverts, unless it is a pumped system.

F. The inlet and outlet pipe or baffle shall extend at least four (4) inches above and at least twelve (12) inches below the water surface. The invert of the inlet pipe shall be at a level not less than two (2) inches above the invert of the outlet pipe. Inlet and outlet pipe or baffles shall be, at a minimum, schedule 40 PVC, ABS or cast-in-place concrete. Such approved pipe shall be SDR 35 or better.

G. Inlet and outlet pipe fittings or baffles and compartment partitions shall have a free vent area equal to the required cross-sectional area of the building sewer or private sewer discharging into the septic tank to provide free ventilation above the water surface from the disposal field or seepage pit through the septic tank, building sewer and stack to the outer air.

H. All septic tanks shall include an effluent filter approved by the department, installed on the outlet of the tank before final discharge, with an access riser installed to grade.

I. The sidewalls, except on cylindrical tanks, shall extend at least nine (9) inches above the liquid depth. The cover of the septic tank shall be at least two (2) inches above the back vent openings.

J. Partitions or baffles between compartments shall be of solid, non-corrosive, durable material and shall extend at least four (4) inches above the water level. Metal or wooden baffles are prohibited.

(1) An inverted fitting equivalent in size to the tank inlet, but in no case less than four (4) inches in size, shall be installed in the inlet compartment side of the baffle with the bottom of the fitting placed midway in the depth of the liquid.

(2) If a horizontal slot is used, the slot shall extend the width of the tank, be no more than 6 inches in height and located midway in the depth of the liquid.

K. Fiberglass or reinforced plastic tanks shall be certified to IAPMO standards.

(1) Each access and inspection hole cover shall have approved fasteners not subject to deterioration by liquid or gases normally present in septic tank systems to assure that the covers will remain in place. All covers shall overlap the hole by a minimum of two (2) inches in all directions.

(2) Each tank shall be free from visual defects such as foreign inclusions, dry spots, air bubbles, pimples and delamination. The inner and outer surfaces shall have a smooth, continuous finish with no exposed fibers. Both the inner and outer surfaces shall have a continuous resin rich surface and no fibers shall be exposed either directly from cracks, porosity or holes, or indirectly through bubbles that may break and expose fibers.

[20.7.3.502 NMAC - Rp, 20.7.3.402 NMAC, 9/1/05]

20.7.3.503 through 20.7.3.600 [RESERVED]

20.7.3.601 DESIGN; ADVANCED TREATMENT SYSTEMS; GENERAL:

A. The level of treatment required and the type of disposal allowed shall be determined by the site evaluation and the character of the waste to be treated and disposed using 20.3.7.605 NMAC. A liquid waste system with an approved non-discharging disposal design may be installed in lieu of the required advanced treatment system.

B. All proprietary treatment systems proposed for secondary or tertiary treatment must meet the performance standards of 20.7.3.602-604 NMAC, and must be certified by the technical advisory committee for that level of treatment.

C. Any design of a conventional or advanced treatment system with site or other limiting conditions that cannot be addressed by following a standard design from alternative resources recognized by the department shall be designed and sealed by a professional engineer.

D. Ventilation of treatment units providing advanced treatment shall be in accordance with the manufacturer's recommendation.

E. If an adequate sampling port or sampling point is not provided in the design of an advanced treatment system, the installer shall provide an acceptable sampling port in the effluent line for the treatment unit. The installer may propose a sampling port configuration.

(1) An acceptable sampling port for a residential unit may be manufactured from an 8-inch diameter pipe. The sample port shall be watertight. The water depth in the pipe shall be at least 4 inches. The outlet will be 1 inch lower than the inlet.

(2) If there are significant settled solids in the sampling well, the sampler shall clean out the sampling port. The sample can be collected either from the influent overflow or from the water collected in the sample port after cleaning.

[20.7.3.601 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.602 DESIGN; SECONDARY TREATMENT STANDARDS:

A. Secondary treatment systems shall meet the following requirements:

(1) 5-day biochemical oxygen demand not to exceed a 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l; and

(2) total suspended solids not to exceed a 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l.

B. Secondary treatment systems and the disposal from secondary treatment systems shall meet the specific site conditions set forth in 20.7.3.605 NMAC.

[20.7.3.602 NMAC - N, 9/1/05]

20.7.3.603 DESIGN; TERTIARY TREATMENT STANDARDS:

A. Tertiary treatment systems shall provide nutrient removal in addition to secondary treatment. B. Utilizing the standard loading equation, (flow (gpd) X conc. (mg/l) X 8.34 lbs./gal. X 365 days/yr)/ 1,000,000 = lbs./yr/ac., and assuming an average of 60 mg/l of TN in the septic tank effluent and a maximum flow of 500 gpd/ac, the following simplified equation shall be used for determining the required TN concentration allowed for a specific lot size: total nitrogen concentration (in mg/l) = [lot size (in acres) / design flow (in gpd)] x 30,000. The concentration limit shall be based on a 6-sample rolling average with no single sample exceeding twice the concentration limit.

C. Tertiary treatment systems and the disposal from tertiary treatment systems shall meet the specific site conditions set forth in 20.7.3.605 NMAC.

[20.7.3.603 NMAC - N, 9/1/05]

20.7.3.604 DESIGN; DISINFECTION TREATMENT STANDARDS:

A. Systems requiring disinfection shall provide treated effluent that shall not exceed 200 colony forming units (CFUs) of fecal coliform bacteria per 100 ml.

B. Disinfection is required to meet the specific site conditions set forth in 20.7.3.605 NMAC.

C. When disinfection is required, the effluent shall be subject to a minimum of secondary treatment prior to disinfection.

[20.7.3.604 NMAC - N, 9/1/05]

20.7.3.605 DESIGN; MINIMUM REQUIRED TREATMENT LEVELS FOR SITE CONDITIONS:

A. The required level of treatment shall be based on the most restrictive combination of siting conditions.

B. The following treatment levels are required for the soil types as described in Table 703.1:

(1) type Ia - secondary treatment and disinfection;

(2) type Ib, II, and III - primary treatment; and

(3) type IV - primary treatment with an appropriate disposal method as approved by the department.

C. The following treatment levels are required for the depth of suitable soil:

(1) greater than or equal to 4 feet of suitable soil - primary treatment;

(2) 1 to less than 4 feet of suitable soil - secondary treatment and disinfection; and

(3) no discharge with less than 1 foot of suitable soil to groundwater, karst or fractured bedrock.

D. The following treatment levels are required for hydraulic loading rates and lot size:

(1) less than or equal to 500 gallons per day per acre with a minimum lot size of 0.75 acre - primary treatment; and

(2) greater than 500 gallons per day per acre or less than 0.75 acre - tertiary treatment.

(3) For lots less than 3/4 acre overlaying naturally occurring anoxic groundwater, secondary treatment shall be required and tertiary treatment may be required. To be exempt from tertiary treatment requirements, the permit applicant shall show by clear and convincing evidence that the discharge of liquid waste shall not degrade a body of water.

E. A non-discharging system may be used in lieu of advanced treatment.

F. A mound system in accordance with 20.7.3.807 NMAC may be used to meet clearance requirements or to overcome soil type limitations in lieu of advanced treatment.

G. If the existing level of nitrate in the groundwater exceeds 5 mg/l, a more advanced level of nitrogen reduction as set forth in Subsection B of 20.7.3.603 NMAC may be required. [20.7.3.605 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.606 through 20.7.3.700 [RESERVED]

20.7.3.701 DESIGN; CONVENTIONAL DISPOSAL FIELD; DESIGN AND CONSTRUCTION:

A. For conventional systems, the distribution lines shall have an inside diameter of no less than four (4) inches. Perforated pipe shall have two rows of holes and a minimum perforated area of one and one-half (1 ½) square inches per linear foot. Perforations shall be located not less than 30 degrees or more than 60 degrees from the vertical on either side of the center line of the bottom of the pipe. All plastic pipe and fittings shall conform to the current and appropriate ASTM standards. End caps shall be installed on all distribution lines.

B. Before placing aggregate or drain lines in a prepared excavation, all smeared or compacted surfaces shall be removed from trenches by raking to a depth of one (1) inch and the loose material removed. Aggregate shall be placed in the trench to the depth and grade required. Drain lines shall be placed on the aggregate in an approved manner. The drain lines shall then be covered with aggregate to a minimum depth of two (2) inches and then covered with untreated building paper, straw or similar porous material to prevent closure of voids with earth backfill. When geotextile fabric is utilized, no aggregate cover of the drainlines is required. No earth backfill shall be placed over the aggregate cover until authorized or approved by the department.

C. The department shall allow drainfields for proprietary systems to be sized in accordance with recommendations by the technical advisory committee that have been approved by the secretary. The technical advisory committee shall make its recommendations upon standardized, objective evaluations in accordance with Section 9-7A-15 NMSA 1978. Drainfields for proprietary systems shall not be reduced in size by more than 30% in comparison to a conventional system.

D. Capped inspection ports shall be constructed, at a minimum, of 4 inch diameter, SDR 35 or better pipe installed at the end of each trench, provide inspection access to the bottom

of the trench and terminate at finished ground level. Inspection ports may be installed below grade if located in a protective enclosure and locatable with GPS coordinates or a metal detector.

E. If seepage pits are used in combination with disposal fields, the aggregate in the trenches shall terminate at least 10 feet from the pit excavation and the line extending from such points to the seepage pit shall be constructed of approved pipe with watertight joints.

F. Where two (2) or more drain lines are installed, an approved distribution box of sufficient size to receive lateral lines shall be installed at the head of each disposal field. The inverts of all outlets shall be level and the invert of the inlet shall be at least one (1) inch above the outlets. Distribution boxes shall be designed to insure equal flow and shall be installed on a level base in natural undisturbed or compacted soil or on a concrete footing._However, the installer, after approval by the department, may install in lieu of a distribution box a tee fitting and a distribution header to multiple trenches provided that the tee and header pipe are level.

(1) Concrete distribution boxes shall be coated on the inside with bituminous coating or other approved method acceptable to the department.

(2) All laterals from a distribution box to the disposal field shall be approved pipe with watertight joints. Multiple disposal field laterals, wherever practicable, shall be of uniform length.

(3) Connections between a septic tank and distribution box shall be laid with approved pipe with watertight joints on natural ground or compacted fill. Such approved pipe shall be SDR 35 or better.

G. When more than five-hundred (500) lineal feet of leach line is required, a low-pressure dosed system shall be used.

H. Disposal fields shall be constructed as follows:

	MINIMUM	MAXIMUM
Number of drain lines	1 per field	
Length of each line	--	155 ft.
Bottom width of trench	12 in.	36 in.
Depth of earth cover of lines	9 in.	--
Depth of Trench	--	6 ft.
Grade of lines	level	3 inch/100 ft.
Aggregate under drain lines	6 in.	--
Aggregate over drain lines with:		
geotextile fabric	0 in.	--
other material	2 in.	--

I. Minimum spacing between trenches or leaching beds shall be four (4) feet plus (2) feet for each additional foot of depth in excess of one (1) foot below the bottom of the drain line. Distribution drain lines in leaching beds shall not be more than six (6) feet apart on centers and no part of the perimeter of the leaching bed shall be more than three (3) feet from a distribution drain line.

J. When necessary to prevent line slope in excess of 3 inches per 100 feet, absorption trenches or beds shall be stepped. The lines between each horizontal section shall be made with watertight joints and shall be designed so each horizontal trench or bed shall be utilized to the maximum capacity before the effluent shall pass to the next lower trench or bed.

The lines between each horizontal absorption section shall be made with approved watertight joints and installed on natural or unfilled ground.
[20.7.3.701 NMAC - Rp, 20.7.3.405 NMAC, 9/1/05; A, 4/1/07]
[For specifications for drainfield pipes, see the following standards: D3034-04a, ASTM F405-97, Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings, or ASTM F810-01]

20.7.3.702 DESIGN; SEEPAGE PIT; DESIGN AND CONSTRUCTION: Seepage pits should only be installed on sites where conventional disposal systems cannot be installed due to site restrictions.

A. The minimum capacity of seepage pits shall conform to the requirements of 20.7.3.703 NMAC.

B. Multiple seepage pit installations shall be served through an approved distribution box or be connected in series by means of a watertight connection laid on undisturbed or compacted soil. The outlet from each seepage pit shall have an approved vented leg fitting extending at least twelve (12) inches below the inlet fitting.

C. Each seepage pit shall have an excavated horizontal dimension of not less than four (4) feet. Each such pit shall be lined with approved type whole, new, hard-burned clay brick, concrete brick, concrete circular type cesspool blocks or other approved materials.

D. The lining in each seepage pit shall be circular and laid on a firm foundation. Lining materials shall be placed tight together and laid with joints staggered. Except in the case of approved type pre-cast concrete circular sections, no brick or block shall be greater in height than its width and shall be laid flat to form at least a four (4) inch wall. Brick or block greater than twelve (12) inches in length shall have chamfered matching ends and be scored to provide for seepage. Excavation voids behind the brick, block or concrete liner shall have a minimum of six (6) inches of clean three fourths (3/4) inch gravel or rock.

E. All brick or block used in seepage pit construction shall have a minimum compressive strength of twenty-five hundred (2500) pounds per square inch.

F. Each seepage pit shall have a minimum sidewall (not including the arch) of ten (10) feet below the inlet pipe.

G. The arch, cover or dome of any seepage pit shall be constructed in one of the following three ways.

(1) Approved type hard-burned clay brick, solid concrete brick or block laid in cement mortar.

(2) Approved brick or block laid dry. In both of the above methods, an approved cement mortar covering of at least two (2) inches in thickness shall be applied, said covering to extend at least six (6) inches beyond the sidewalls of the pit.

(3) Approved type one or two piece reinforced concrete slab of three thousand (3000) pounds per square inch minimum compressive strength, not less than five (5) inches thick and designed to support an earth load of not less than four hundred (400) pounds per square foot.

H. Each such arch, dome or cover shall be provided with a nine (9) inch minimum inspection hole with plug or cover and shall be coated on the underside with an approved bituminous or other nonpermeable protective compound.

I. The top of the arch, dome or cover must be a minimum of twelve (12) inches but not more than four (4) feet below the surface of the ground. Risers must be provided to extend the arch, dome or cover to within twelve (12) inches of the surface.

J. An approved vented inlet fitting shall be provided in every seepage pit so arranged as to prevent the inflow from damaging the sidewall. When using a one or two piece concrete slab cover inlet, the inlet fitting may be an approved one fourth (1/4) bend fitting discharging through an opening in the top of the slab cover. On multiple seepage pit installations, the outlet fittings shall meet the requirements of Subsection B of 20.7.3.702 NMAC.

[20.7.3.702 NMAC - Rp, 20.7.3.406 NMAC, 9/1/05; A, 4/1/07]

20.7.3.703 DESIGN; AREA OF DISPOSAL FIELD AND SEEPAGE PITS:

A. The minimum required absorption area in a disposal field in square feet, and in seepage pits in square feet of side wall, shall be predicated on the liquid waste design flow rate and shall be determined by utilizing the following Table 703.1 based on the soil classification found in the proposed location of the disposal field.

B. Two test holes, located at opposite ends of the proposed disposal area, may be required for obtaining the soil profile and as provided in Subsection A of 20.7.3.203 NMAC.

C. A detailed soil profile, in accordance with USDA soil classification methodology, shall be submitted with the liquid waste application for each hole, indicating soil horizons, horizon thickness as a function of depth, and soil texture.

D. USDA soil surveys may be used where available to help assess typical soils in the area of the proposed installation.

E. The required absorption area shall be sized on the most restrictive soil horizon located below and within 4 feet of the bottom the absorption area.

F. Conventional treatment systems shall not be constructed in type Ia soils where the depth to groundwater is less than 30 feet or gravel. For these soils, refer to 20.7.3.605 NMAC.

G. Effluent distribution to type IV soils shall be accomplished with an appropriate disposal method as approved by the department such as timed low pressure dosed distribution or alternating drianfields.

H. The required absorption area shall be calculated by the following formula: ABSORPTION AREA = Q X AR, where: Q = the design flow rate in gallons per day; AR = application rate (from Table 703.1)

Table 703.1: Application Rates by Soil Types for Conventional Treatment Systems

Soil Type	Soil Texture	Application Rate (AR) (sq. ft./gal/day)
Ia	Coarse Sand	1.25 (See Subsection F of 20.7.3.703 NMAC)
Ib	Medium Sand, Loamy Sand	2.00
II	Sandy Loam, Fine Sand , Loam	2.00

III	Silt, Silt Loam, Clay Loam, Silty Clay Loam, Sandy Clay Loam	2.00
IV	Sandy Clay, Silty Clay, Clay	5.00 (See Subsection G of 20.7.3.703 NMAC)

I. The gravel content of in-place natural soil shall not exceed 30%.

J. Disposal trenches shall conform to the following.

(1) The trench width shall be no less than one foot or no more than three feet.

(2) A minimum of six inches of aggregate shall be placed below the invert of the distribution pipe to provide surge storage. This area of trench sidewall shall not be used in calculating the absorption area.

(3) Up to an additional three feet of aggregate may be placed below the distribution pipe.

(4) The total absorption area shall be calculated utilizing the total trench bottom and sidewall area, excluding the six inches of trench sidewall required in Paragraph (2) of this subsection.

(5) The total absorption area shall not exceed seven square feet per linear foot of trench.

(6) A minimum of 300 square feet of absorption area shall be provided for each system exclusive of any hard pan, caliche, rock, clay or other impervious formations.

K. Leaching (absorption) beds are allowed. The absorption area of the bed shall be at least fifty (50) percent greater than the minimum required absorption area for trenches with a minimum of two hundred and twenty-five (225) square feet of bottom area. In addition, leaching beds shall conform to the following.

(1) A minimum of twelve inches of aggregate shall be placed below the invert of the distribution pipes.

(2) Up to an additional one foot of aggregate may be placed below the distribution pipes.

(3) The total absorption area shall be calculated utilizing the total bed bottom and sidewall area.

L. The minimum effective absorption area in any seepage pit shall be calculated as the excavated side wall area below the inlet pipe exclusive of any hardpan, caliche, rock, clay or other impervious formations and may be provided in one or more seepage pits.

M. For secondary and tertiary treated effluent, the minimum calculated absorption area required for conventional treatment may be reduced 30% and the maximum trench depth may be no greater than 10 feet. In no case shall the maximum reduction for the drainfield absorption area exceed 30%.

[20.7.3.703 NMAC - Rp, 20.7.3.403 NMAC, 9/1/05; A, 4/1/07]

20.7.3.704 through 20.7.3.800 [RESERVED]

20.7.3.801 DESIGN; ALTERNATIVE DISPOSAL: Alternative disposal systems include, but are not limited to, privies, cluster systems, composting/incinerating toilets,

evapotranspiration systems, mounds, subsurface irrigation, holding tanks, graywater systems and others as approved by the department.
[20.7.3.801 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.802 PRIVIES:

A. A privy or outhouse may be used to dispose of non-liquid-carried human excreta directly to the soil. In addition to all setback and clearance requirements in 20.7.3 NMAC, the following conditions are required.

(1) The privy or outhouse is constructed to prevent access by flies or vermin.

(2) The privy or outhouse is located to prevent flooding.

(3) There is sufficient replacement area for two (2) additional pits.

(4) Privy or outhouse pits shall be filled with clean earth when excreta accumulate to within one foot of the ground surface.

(5) No privy or outhouse shall be located on a lot less than 0.75 acre.

B. No person shall install or have installed a privy or outhouse unless that person obtains a permit issued by the department prior to construction of such installation. At the time of application, the total number of privies or outhouses and their replacement locations shall be indicated. When a privy or outhouse pit is filled, the privy or outhouse may be moved to a previously identified replacement location on the same lot without modifying or amending the permit.
[20.7.3.802 NMAC - N, 9/1/05]

20.7.3.803 CLUSTER SYSTEMS:

A. Use of a cluster system may be considered when lot sizes, location or site conditions make conventional disposal unacceptable.

B. Cluster systems shall be designed and constructed in accordance with the requirements of this regulation. In addition, cluster systems shall be maintained in accordance with 20.7.3.902 NMAC.

C. Each user and successors and assignees in interest connected to the system shall be a permittee and shall be indicated on the permit.

D. After the effective date of the regulation, each permittee and successors and assignees in interest on a cluster system shall be a party to a legally binding, written agreement that provides for the service and maintenance for the life of the system. The agreement shall be recorded in the county in which the property is located. A copy of the agreement shall be provided to the department.

E. The parties to the written agreement shall obtain all necessary rights-of-way, easements or ownership of properties necessary for the operation of the system. All parties that use the cluster system shall be a party to the agreement.

F. The combined area of the lots served by the cluster system plus the area of the parcel where the system is located, if separated from the lots served, shall be used to determine the allowable lot size.
[20.7.3.803 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.804 COMPOSTING AND INCINERATING TOILETS:

A. The installation of composting and incinerating toilets certified as meeting ANSI/NSF International Standard 41 shall be permitted.

B. The installation of a composting/incinerating toilet shall not reduce the design flow for the property.

C. Composting/incinerating toilets shall not be used on a lot less than 0.75 acre.

[20.7.3.804 NMAC - N, 9/1/05]

20.7.3.805 IRRIGATION/REUSE SYSTEMS:

A. Effluent used for irrigation shall meet secondary treatment standards.

B. The effluent may only be utilized subsurface.

C. Application of the effluent resulting in standing or ponding of the effluent, whether liquid or frozen, shall be prohibited. The application of effluent shall not result in the effluent leaving the application area.

D. Irrigation systems shall have no cross connections, direct or indirect, with potable water systems.

E. All irrigation systems shall be pressure dosed to assure an even distribution and loading of effluent throughout the application area.

F. All parts of the reuse system shall be protected from freezing.

G. Effluent shall be contained on the permitted property.

H. The effluent shall be applied to a suitable landscaped area.

I. Secondary treated and disinfected effluent may be used for toilet flushing or fire suppression with department approval.

J. Setback requirements for irrigation systems shall meet the requirements of 20.7.3.302 NMAC except for the following:

(1) property lines, 2 feet for disposal area; and

(2) building or structure, 2 feet for disposal area.

[20.7.3.805 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.806 EVAPOTRANSPIRATION SYSTEMS:

A. Evapotranspiration systems shall consist of a treatment unit and an evapotranspiration bed (ET bed) for disposal. Effluent discharged to an ET bed shall not exceed 200 mg/l of BOD. Evapotranspiration systems shall meet the requirements of 20.7.3.302 NMAC. Unlined ET beds are a discharging system and shall meet the clearance, set back and lot size requirements for conventional absorption systems. Lined ET beds are nondischarging systems and shall be underlain by a liner as specified in Paragraph (3) of Subsection L of 20.7.3.7 NMAC and shall provide for a leak detection method.

B. The minimum bottom area of ET beds shall be determined from the following formula:

$A = 391 \times Q \div E_L$, where: A = the bottom area of the bed in square feet; Q = the design flow in gallons per day; and E_L = the average annual lake evaporation for the site in inches per year.

C. The average annual lake evaporation shall be determined from the map "Gross Annual Lake Evaporation, New Mexico", USDA, April 1972, or successor version or a mutually acceptable evaporation rate.

D. The minimum bed depth shall be twenty four (24) inches as measured from the bottom of the ET bed to the overflow level. The surface crowning, which increases runoff from the ET bed, is above the overflow level of the ET bed. Maximum ET bed depth shall be thirty (30) inches. The bottom of the ET bed shall be level.

E. The ET bed location shall be in an area where exposure to the sun and wind will be maximized.

F. The distribution piping within the ET bed shall be embedded in gravel and covered meeting the specifications in 20.7.3.701 NMAC. Use of approved proprietary drainfield products may be used in lieu of pipe and gravel.

G. The capillary sand fill shall contain eighty five (85%) or more sand; the percentage of silt plus one and one-half times the percentage of clay shall not exceed fifteen percent (15%). Fine to medium sand is preferred.

H. A loamy sand shall be used for the surface crown. Where a loamy sand is not available, capillary sand may be used.

I. The crown surface shall be planted with vegetation suited to the climate and soil of the site and to the wastewater quality and quantity.

J. For a gravity feed system the overflow height of the ET bed shall be lower than the invert of the septic tank outlet.

K. All ET beds shall be equipped with an inspection port that is suitable to use to pump the system, if needed.

[20.7.3.806 NMAC - N, 9/1/05]

20.7.3.807 MOUND AND ELEVATED SYSTEMS:

A. Mound systems shall meet the requirements of 20.7.3.302 NMAC.

B. Mounds are generally constructed entirely above the surrounding ground surface, however, the mound may be partially buried.

C. The design of the mound system shall be in accordance with the most current design standards of the Wisconsin mound system, or other system designs as approved by the department.

D. Pressure distribution to the mound shall be required.

E. An elevated system shall meet the requirements of 20.7.3.302 NMAC.

F. Elevated systems may be constructed entirely above the surrounding grade or partially buried, as site conditions require.

G. An elevated system must be installed in accordance with proven design criteria and approved by the department.

[20.7.3.807 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.808 LOW PRESSURE DOSED DISPOSAL SYSTEMS:

A. Low pressure dosed (LPD) disposal systems may be used to achieve uniform distribution of wastewater over the entire infiltrative surface. Effluent from this type of system is pumped under low pressure through solid pipe into perforated lateral lines installed within a disposal system.

B. Low pressure dosed disposal systems may be used with any on site liquid waste system including conventional treatment systems, gray water systems and advanced treatment systems.

C. Low pressure dosed disposal systems may be used with any disposal system including trenches, beds, mounds, gravelless systems, evapotranspiration systems and drip irrigation.

D. Lift stations are not classified as low pressure dosed disposal systems.

E. Low pressure dosed disposal systems may use a timer to equalize the flow over a 24-hour period. LPD disposal systems may also be designed to rotate between separate disposal areas by using rotator valves.

F. Low pressure dosed disposal systems may use dosing siphons or pumps.

G. All pumps shall be rated by the manufacturer for pumping sewage or effluent.

H. A single pump may be used for design flows equal to or less than 1,000 gpd. Dual pumps are required for design flows over 1,000 gpd.

I. Design of the system shall include:

(1) design flow;

(2) except for mound systems, soil absorption area sized according to the effluent loading rates found in 20.7.3.703 NMAC;

(3) spacing between lines with a minimum of 2 feet of separation;

(4) length of pipe;

(5) diameter of perforated lateral lines used;

(6) size and spacing of holes or emitters; and

(7) pump performance sizing with allowances for head and friction losses at rated flows in gallons per minute.

J. A ball valve shall be located vertically at the end of each lateral line for inspection and flushing except for proprietary drip irrigation systems.

K. Approved proprietary drip irrigation systems shall be designed and installed according to manufacturer's specifications.

L. Lateral lines shall be placed parallel to the natural contours of the site.

M. The distribution holes in the lateral lines shall be shielded or protected in some manner to prevent the infiltration of soil into the pipe.

[20.7.3.808 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.809 HOLDING TANK REQUIREMENTS:

A. The installation of holding tanks for the disposal of liquid wastes shall be authorized on a temporary basis only and only for residential units where conventional or alternative liquid waste treatment systems cannot be installed, except where noted in paragraph E below.

B. The installation of holding tanks shall not be authorized for commercial units.

C. Holding tanks shall not be installed to serve any design flow greater than 375 gallons per day, except to replace an existing holding tank. Total design flow on any property served by a holding tank shall not exceed 375 gallons per day.

D. The installation of holding tanks shall be authorized for no more than one (1) year from the date of installation for units occupied more than one hundred twenty (120) days per calendar year.

E. The installation of holding tanks shall be authorized for permanent use only for the following:

(1) residential units, with a design flow rate of 375 gpd or less, occupied one hundred twenty (120) days or less per calendar year;

(2) residential units utilizing the holding tank only for the discharge of toilet waste in conjunction with a conventional treatment system for the remainder of the wastewater;

(3) non-residential, non-commercial units, such as guard shacks, toll booths, etc., with a design flow rate of 100 gpd or less; and

(4) the collection of RV wastes and portable toilet wastes for disposal in accordance with 20.7.3.306 NMAC.

F. Holding tanks shall be constructed of the same materials, by the same procedures and to the same standards as described in 20.7.3.501-502 NMAC except that they shall have no discharge outlet.

G. All holding tank installations shall be tested on site for water tightness.

H. The minimum size of a holding tank shall be 1000 gallons or four (4) times the design flow, whichever is greater.

I. Holding tanks shall be located in an area readily accessible to a pump vehicle under all weather conditions and where accidental spillage during pumpage will not create a nuisance or a hazard to public health.

J. Holding tanks shall be protected against flotation under high ground water conditions by weight of tank (ballasting), earth anchors or by surface or shallow installation. Holding tanks shall be protected from freezing.

K. Holding tanks shall be equipped with a visible and audible high water alarm system placed in a conspicuous location approved by the department. The alarm shall be set to activate at 80% of the tank capacity. It shall be a violation of these regulations to tamper with or disconnect the alarm system.

L. The owner of a holding tank shall have the tank pumped to prevent discharge from the tank and the liquid waste (septage) properly disposed of in compliance with all applicable laws and regulations. Owners of holding tanks shall maintain records demonstrating pumping and proper disposal of septage from the units to prevent discharge. Copies of pumping and disposal manifests shall be retained by the owner for at least seven years and shall be made available to the department for inspection on request. The records shall be:

(1) kept on a form provided by the department if requested;

(2) accompanied by such other documentation as the department may reasonably require;

(3) signed by the lot owner or an authorized representative; and

(4) submitted on a semi-annual basis, or a schedule otherwise determined by the department, to the department field office having jurisdiction.

M. No person shall install, operate, modify or maintain a holding tank that allows discharge to the soil or to waters of the state.

N. The department may perform site inspections periodically to ensure that a holding tank does not discharge.

O. All residential and commercial units utilizing a holding tank shall connect to a public sewer upon availability and in accordance with the local authority that has jurisdiction. A public sewer shall be deemed available when the public sewer is located in any thoroughfare, right-of-way or easement abutting the lot on which the residential or commercial unit is located. The holding tank shall be properly abandoned in accordance with 20.7.3.307 NMAC within 30 days of connection to the public sewer.

[20.7.3.809 NMAC - Rp, 20.7.3.305 NMAC, 9/1/05]

20.7.3.810 GRAYWATER DISCHARGES: Graywater discharge of less than 250 gallons per day of private residential graywater originating from a residence for the resident's household flower gardening, composting or landscaping irrigation shall be allowed if:

A. a constructed graywater distribution system provides for overflow into the sewer system or on-site wastewater treatment and disposal system;

B. a graywater storage tank is covered to restrict access and to eliminate habitat for mosquitos or other vectors;

C. a graywater system is sited outside of a floodway;

D. graywater is vertically separated at least five feet above the ground water table;

E. graywater pressure piping is clearly identified as a nonpotable water conduit;

F. graywater is used on the site where it is generated and does not run off the property lines;

G. graywater is discharged in a manner that minimizes the potential for contact with people or domestic pets;

H. ponding is prohibited, discharge of graywater is managed to minimize standing water on the surface and to ensure that the hydraulic capacity of the soil is not exceeded;

I. graywater is not sprayed;

J. graywater is not discharged to a watercourse;

K. graywater use within municipalities or counties complies with all applicable municipal or county ordinances enacted pursuant to Chapter 3, Article 53 NMSA 1978;

L. graywater is not stored longer than 24 hours before being discharged;

M. graywater use for purposes other than irrigation or composting is prohibited, unless a permit for such use is issued by the department;

N. graywater is not used to irrigate food plants except for fruit and nut trees;

O. graywater is discharged to a mulched surface area or to an underground irrigation system;

P. graywater is not discharged closer than 100 feet to a watercourse or private domestic well, or closer than 200 feet to a public water supply well;

Q. graywater does not create a public nuisance;

R. for residential units using an on-site liquid waste system for blackwater treatment and disposal, the use of a graywater system does not change the design, capacity or absorption area requirements for the on-site liquid waste system at the residential unit, and the on-site liquid waste system is designed and sized to handle the combined blackwater and graywater flow if the graywater system fails or is not fully used; and

S. graywater does not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags or disposing of waste solutions from home photo labs or similar hobbyist or home occupational activities.

[20.7.3.810 NMAC - Rp, 20.7.3.310 NMAC, 9/1/05]

20.7.3.811 GRAYWATER SYSTEMS: Graywater systems not meeting the requirements of 20.7.3.810 NMAC shall meet the following requirements:

A. The installation of separate graywater systems shall be authorized for residential units and shall be located on the lot served. The capacity of the on-site liquid waste system, including required replacement area, shall not be decreased or otherwise affected by the existence or proposed installation of a graywater system servicing the lot.

B. All information required in 20.7.3.402 NMAC for the issuance of a permit shall be required.

C. Design flows for graywater systems shall be calculated by the following:

(1) Twenty percent (20%) of the total design flow for the segregation of laundry waste; and

(2) Thirty-three percent (33%) of the total design flow for the segregation of the bathroom (showers, tubs and wash basin) waste.

D. For graywater systems on lots where the residential unit is served by a sewerage system, the minimum lot size set forth in 20.7.3.301 NMAC shall not be required.

E. Clearance requirements for graywater systems shall meet the requirements of 20.7.3.303 NMAC.

F. Setback requirements for graywater systems shall meet the requirements of 20.7.3.302 NMAC except for the following:

(1) property lines, two (2) feet for disposal area;

(2) building or structure, two (2) feet for disposal area; and

(3) building or structure, zero (0) feet for above ground tanks.

G. A treatment unit shall be required for all graywater systems. If a tank is utilized as the treatment unit:

(1) the tank may be a single compartment;

(2) the tank shall be sized to accommodate one day design flow; and

(3) access to the tank shall be provided by a tamper resistant lid installed at grade.

Graywater should be utilized within twenty-four (24) hours of collection unless additional treatment is provided.

H. Tanks installed below ground shall meet the requirements of 20.7.3.501-502 NMAC except for the requirements stated in Paragraph G of this section. Tanks shall be protected against possible floatation.

I. Above ground tanks shall be constructed of solid durable materials, not subject to corrosion or decay and shall be approved by the department. Above ground tanks shall be set on a three inch (3") minimum concrete pad. Metal tanks shall not be authorized.

J. All tanks shall have an overflow drain with a permanent connection to the building drain or building sewer. The tank shall be protected against sewer line backflow by a backwater valve.

K. Each tank shall be vented as required by chapter 9 of the uniform plumbing code.

L. Each tank shall have its rated liquid capacity permanently marked on the unit. In addition, a sign "GRAYWATER SYSTEM, DANGER – UNSAFE WATER" shall be permanently marked on the tank.

M. The disposal system shall be constructed in accordance with 20.7.3.805 NMAC.

N. The graywater system shall have no direct or indirect cross connections with potable water systems.

O. Graywater use for purposes other than irrigation or toilet flushing is prohibited. Irrigation of edible food crops is prohibited.

[20.7.3.811 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.812 PUMP STATIONS AND EQUIPMENT:

A. Pump stations or pump chambers shall be watertight and shall be constructed of concrete, plastic, fiberglass or other approved material. Tanks and chambers shall be designed and constructed so as to serve their intended purpose and appropriately coated to resist corrosion.

B. All valves, motors, pumps, aerators and other mechanical or electrical devices shall be located where they will be accessible for inspection and repair at all times and protected with a locking removable cover.

C. Pump stations or pump chambers shall be equipped with both audible and visual alarms, or remote and visual alarms, for high water and pump failure. All alarm and control circuits shall be on a separate circuit from pumps and shall be contained in weather-proof control boxes or located inside a building or other weather proof structure. Alarms shall be placed in a conspicuous location approved by the department.

[20.7.3.812 - Rp 20.7.3.402 NMAC, 9/1/05]

20.7.3.813 BUILDING SEWER:

A. The building sewer connects the building drain to the septic tank or liquid waste treatment unit. Horizontal building sewer piping shall be run in practical alignment and a uniform slope of not less than one-fourth (1/4) of an inch per foot or two percent (2%) toward the point of disposal provided that where it is impractical due to the structural features or arrangement of any building or structure to obtain a slope of one-fourth (1/4) of an inch or two percent (2%), any such pipe or piping four (4) inches in diameter or larger may have a slope of not less than one-eighth (1/8) of an inch per foot or one percent (1%), when first approved by the department.

B. Each horizontal sewer pipe shall be provided with a cleanout at its upper terminal and each run of pipe that is more than one hundred (100) feet in length shall be provided with a cleanout for each one hundred (100) feet or fraction thereof. Cleanouts shall be installed pursuant to the uniform plumbing code (UPC).

C. Sewer piping shall be an approved material having a smooth uniform bore. Vitrified clay pipe or fittings shall not be used above ground or where pressurized by a pump or ejector. Vitrified clay pipe or fittings shall be a minimum of twelve (12) inches below ground.

[20.7.3.813 - Rp, 20.7.3.402 NMAC, 9/1/05]

20.7.3.814 through 20.7.3.900 [RESERVED]

20.7.3.901 MONITORING:

A. As a condition to any permit, the owner of a on-site liquid wastes system shall permit department personnel right of entry to the property at reasonable times to allow for effluent sampling or evaluating the general state of repair or function of the system.

B. On-site liquid waste systems that require secondary treatment levels be achieved shall be sampled and analyzed only for 5-day BOD quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable calibration curve as approved by the department.

C. On-site liquid waste systems that require tertiary treatment levels be achieved shall be sampled and analyzed only for total nitrogen quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit.

D. Advanced systems requiring disinfection shall be sampled and analyzed for fecal coliform quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department. In addition:

(1) when chlorine is used for disinfection, the total chlorine residual, at all times, shall be equal to or greater than 1.0 mg/l after thirty (30) minutes detention time at peak flows; and

(2) alternative disinfection methods, such as ultraviolet light, ozone or other methods, may be utilized after department approval.

E. All sampling and analysis shall be performed by certified personnel in accordance with the most current edition of *standard methods for the examination of water and wastewater* or other methods, including field instruments, approved by the department.

F. Sampling shall occur between the hours of 7:00 am and 7:00 pm.

G. Monitoring reports shall be submitted to the local field office within thirty (30) days of the required sampling event.

H. All test results exceeding the permit limits shall be reported to the local field office within five (5) working days.

I. Sampling frequency shall be quarterly for the first year, semi-annually for the second year, and yearly thereafter, unless otherwise specified in the permit.

J. If any two consecutive samples exceed the single sample limit, the system design and operation shall be evaluated by a professional engineer or a maintenance service provider for conformance with permitting conditions and shall be adjusted to bring the effluent quality into compliance.

K. If the 6-sample rolling average exceeds the treatment standards specified in 20.7.3.602 and 603 NMAC, the treatment system shall be subject to review and re-evaluation with regard to operation and maintenance. A department approved contingency plan, including more training for the maintenance service provider or replacement with a more experienced operator, may be implemented.

L. The following shall be considered as violations of the monitoring requirements of the permit.

(1) Failure to collect, analyze and report sampling results.

(2) The submission, by the owner or maintenance entity of an advanced treatment system or agent or employee thereof, of misleading or inaccurate information to the department, through neglect.

(3) The submission of fraudulent data including the following:

(a) apparent measurement results for which no measurement or test results were actually made as determined by the absence of the supporting records that are usually made;

(b) measurements or test results obtained by deliberately and knowingly making measurements or collecting samples at places and times other than as specified in the permit or 20.7.3 NMAC; and

(c) test results obtained through use of unapproved and erroneous sampling, preservation, storage or analysis procedures.

[20.7.3.901 NMAC - N, 9/1/05]

20.7.3.902 OPERATION AND MAINTENANCE REQUIREMENTS AND INSPECTION REQUIREMENTS AT TIME OF TRANSFER:

A. The owner of an on-site liquid waste system, including systems existing prior to the effective date of this regulation, shall be responsible for properly operating and maintaining

the system in accordance with the recommendations of the manufacturer or designer of the system.

B. The owner of an advanced treatment system installed after the effective date of this regulation shall enter into a department approved maintenance contract with a maintenance service provider that will assure maintenance of the system in accordance with the recommendations of the manufacturer or designer of the system. A maintenance contract shall be in effect at all times.

C. Household hazardous waste and high strength waste shall not be introduced into the system.

D. Any spillage that may occur during tank pumpout shall be cleaned up immediately and the spill area disinfected with a sodium or calcium hypochloride solution.

E. Prior to the transfer of a property with an existing permitted on-site liquid waste system, the current system owner shall have the system inspected. Permitted liquid waste systems shall be ~~and~~ evaluated by an inspector qualified in accordance with Subsection C of 20.7.3.904 NMAC utilizing a department approved form. Unpermitted liquid waste systems shall be inspected by the department and registered pursuant to Subsections J or K of 20.7.3.401 NMAC.

F. For advanced treatment systems:

(1) the system shall be sampled in accordance with permit conditions for compliance with 20.7.3.602-604 NMAC if a regularly scheduled sampling event has not occurred within 180 days of the inspection; the sampling results shall be included with the system report; if a regularly scheduled sampling event has occurred within 180 days of the inspection, the results of the sampling shall be included in the inspection report; and

(2) an amendment of permit reflecting ownership change is required pursuant to Subsection E of 20.7.3.403 NMAC.

~~F~~G. Inspections shall be recorded on forms approved by the department. Inspection reports shall be kept on file by the inspector of the on-site liquid waste system. Inspectors shall submit to the department copies of all inspection reports, whether completed or not, within 15 days of the inspection. A permit or variance application shall be submitted within 15 days of the inspection to correct any deficiencies or permit violations identified by the inspection. In addition, all inspection reports shall include the global positioning system (GPS) coordinates of the tank. Once an inspection is requested, all results, whether complete or not, shall be submitted to the department.

~~G~~H. In the event of a failed system, that includes, but is not limited to disposal fields, the owner shall remedy the failed system with department approval.

[20.7.3.902 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.903 MAINTENANCE SERVICE PROVIDERS (MSP) FOR CONVENTIONAL AND ADVANCED ON-SITE LIQUID WASTE SYSTEMS:

A. Maintenance service providers (MSP) shall at a minimum:

(1) obtain certification by the national association of waste transporters (NAWT) or equivalent;

(2) inspect, operate and maintain the system in accordance with the manufacturer's specification; and

(3) submit pumping and inspection records upon request to the department.

B. The MSP personnel shall be certified by the manufacturer for the proprietary unit being maintained.

C. The MSP personnel shall be trained in the proper operation and maintenance of the system.

D. The MSP personnel shall have the ability to sample the unit in accordance with approved sampling methods under this part.

E. The MSP shall have in place a standardized quality assurance/quality control (QA/QC) plan.

F. The MSP shall be able to respond to emergency situations within forty-eight (48) hours of being notified.

G. A public MSP shall adopt an ordinance, bylaw or rule, as appropriate, approved by the department, detailing the terms and conditions of service.

H. A private MSP shall use a contract for service that contains, at least, minimum standards approved by the department.

I. The MSP shall meet minimum requirements, as promulgated by the department, for effective operation, such as:

(1) reasonable response time;

(2) appropriate equipment;

(3) parts inventory;

(4) quality assurance/quality control plan; and

(5) insurance.

J. The MSP shall notify the department of any failed system.

[20.7.3.903 NMAC - N, 9/1/05]

20.7.3.904 REQUIREMENTS FOR ~~CERTIFICATION~~ QUALIFICATION:

A. Qualified homeowner.

(1) A homeowner must become qualified to install an on-site liquid waste system.

(2) Homeowner training materials and opportunities for exams, by appointment, shall be available at all department field offices.

(3) A qualified homeowner may apply for a permit to install or modify a conventional on-site liquid waste treatment and disposal system serving their personnel residence in accordance with Subsection C of 20.7.3.401 NMAC.

(4) A qualified homeowner shall not be allowed to install or modify an on-site liquid waste system serving a rental unit or other property that is not the qualified homeowner's personal residence.

(5) A homeowner qualification shall be valid for one year, or longer as approved by the department for good cause shown.

(6) A qualified homeowner may install no more than one liquid waste system during each twelve month period.

B. Third party inspector.

(1) Inspections of liquid waste systems prior to property transfers are required by 20.7.3.902 NMAC. The department shall inspect unpermitted liquid waste systems. Third party inspectors shall inspect permitted liquid waste systems.

(2) Qualification as a third party inspector , in addition to, a valid and appropriate classification of licensure (MM1, MM98, MS3) by the construction industries division of the regulation and licensing department, shall be based on one of the following:

(a) ~~a valid and appropriate classification of licensure by the construction industries division of the regulation and licensing department;~~

(a~~b~~) certification as a professional engineer with a specialty sub-discipline of on-site wastewater engineering;

(b~~e~~) accreditation in on-site wastewater inspection by the national sanitation foundation (NSF);

(c~~d~~) certification by the national environmental health association (NEHA) as an installer of on-site wastewater treatment systems; or

(d) NAWT certified inspector by National Association of Wastewater Transporters, Inc., or

(e~~d~~) demonstration of a combination of training and experience as approved by the department.

(f) inspection of advanced wastewater treatment systems shall be performed only by persons qualified pursuant to Subsection ~~D~~ C ~~or~~ of 20.7.3.904.

C. Maintenance service provider of an advanced treatment system.

(1) Maintenance service providers shall comply with 20.7.3.903 NMAC.

(2) In order to obtain approval by the department, ~~and in addition to receiving a recommendation for approval by the wastewater technical advisory committee,~~ manufacturers of advanced treatment systems shall provide a written training and certification program, for approval by the department, for installers and maintenance service providers of their systems. Installers and maintenance service providers of advanced treatment systems shall receive the training approved by the department at least once ~~per year~~ every three (3) years. Department representatives may audit training classes provided by the manufacturers for the purpose of evaluating the training provided.

(3) Maintenance service providers for orphaned advanced treatment systems shall be qualified by the department. Qualification as a maintenance service provider for orphaned systems in addition to one manufacture maintenance service provider certification will based on the following:

(a) certification as an advanced small systems, level III or level IV wastewater operator from the state of New Mexico;

(b) certification at an acceptable level as a wastewater operator from another state; or

(c) 16 hours of continuing education units (CEU's) in advanced treatment operation and maintenance;

(d) NAWT operations and maintenance one and two; or

(e~~e~~) other credentials, as approved by the department.

G. Suspensions, revocation and denials.

(1) The department may deny a qualification if it determines that an applicant does not meet all eligibility requirements set forth above.

(2) The department, at any time, may suspend or revoke a qualification for cause to include fraud, misrepresentation, failure to provide required documentation, failure to provide service in accordance with the qualification or failure to comply with 20.7.3 NMAC. Suspension or revocation shall be by issuance of an Order.

(3) Any person who desires to appeal a denial, suspension, revocation or disqualification may appeal to the secretary. An appeal is initiated by submitting a request for a hearing. The request for a hearing must be in writing and made no later than 30 days after notice

of the action is served. Upon such request, the secretary shall conduct a hearing pursuant to the adjudicatory procedures in 20.1.5 NMAC.

~~A. The department will develop a certification program by July 1, 2007 that addresses the specifications below and as provided by law. After July 1, 2009:~~

~~(1) any person offering services pertaining to an on-site liquid waste system, including site evaluator, system designer, installer, wastewater reuse irrigator, inspector, maintenance service provider or septage pumper, shall be certified after completing a program and passing an exam approved by the department;~~

~~(2) employees of the department reviewing, approving or inspecting on-site liquid waste systems shall be certified as department liquid waste specialist after completing a program and passing an exam approved by the department; and~~

~~(3) a homeowner shall complete a program and pass an exam approved by the department prior to the issuance of a permit for a homeowner installed system.~~

~~B. General requirements for certifications of persons involved in the liquid waste program are specified below.~~

~~(1) Site evaluators shall demonstrate competence in soil evaluation to determine acceptable liquid waste disposal application rates and identify potential areas of concern, such as fractured bedrock, shallow ground water and karst terrain.~~

~~(2) Liquid waste system designers that configure conventional treatment systems and approved proprietary advanced systems shall demonstrate competence in configuration of on-site liquid waste systems, certification by the manufacturer of approved systems proposed and a basic understanding of the treatment and disposal process.~~

~~(3) Installers shall possess a valid, applicable New Mexico contractor's license and demonstrate competence in the installation of on-site liquid waste systems.~~

~~(a) An installer 1 shall demonstrate competence in the installation of conventional treatment and disposal systems and holding tanks.~~

~~(b) An installer 2 shall demonstrate competence in all forms of on-site liquid waste systems. An installer 2 must have at least 3 years of installation experience, 30 hours of approved coursework and certified by the manufacturer of approved systems they install.~~

~~(4) Wastewater reuse irrigation service providers shall possess a valid, applicable New Mexico contractor's license and demonstrate competence in the configuration, installation, operation and maintenance of wastewater irrigation systems and the protection of public health.~~

~~(5) Inspectors shall demonstrate competence in the inspection of on-site liquid waste systems. Certification by the national association of waste transporters (NAWT), NSF international or a department-approved program is demonstration of competence in the inspection of conventional treatment and disposal systems.~~

~~(6) Maintenance service providers (MSP) shall demonstrate competence in the operation and maintenance of on-site liquid waste systems. Persons providing service shall follow department procedures for MSP and shall be certified by the manufacturer of the systems they operate and maintain.~~

~~(7) Septage pumpers shall demonstrate familiarity with applicable regulations and demonstrate competence in locating and exposing septic tanks, measuring septic tank sludge and scum levels, the complete pumping of septic tank sludge, maintenance of pumping equipment in~~

~~a sanitary condition, prevention of pathogen transmission and preparation of an appropriate safety plan for normal operations.~~

~~(8) Manufacturers of approved advanced treatment systems shall provide training and certification for their systems at least once per year. Manufacturers may charge reasonable fees for their training and certification.~~

~~C. Limitations on scope of services.~~

~~(1) Liquid waste system designers may only configure conventional treatment systems, approved proprietary advanced treatment systems and conventional, proprietary and alternative disposal systems described in 20.7.3 NMAC.~~

~~(2) Installer 1 may only install conventional treatment systems and conventional disposal systems that do not involve dosing or other mechanical distribution systems.~~

~~(3) Installer 2 may install all forms of on-site liquid waste systems.~~

~~D. Expiration and renewal of certifications and establishment of fees.~~

~~(1) Certifications are valid for a period up to three (3) years and shall expire on December 31 of the third year of issuance.~~

~~(2) Renewal of certifications require completion of at least 8 hours of continuing education units per year approved by the department.~~

~~(3) The department shall establish fees for the initial application and renewal of certifications.~~

~~E. Suspension, revocation and denials.~~

~~(1) The department may suspend or revoke a certification for cause. Failure to provide service in accordance with the certification shall be grounds for revocation of the certification.~~

~~(2) The department may deny certification if it determines that an applicant does not meet all requirements of this part or has violated any provision of these regulations.~~

~~F. Education steering committee. The secretary shall appoint an education steering committee. The committee shall consist of at least one representative of each classification for which certification is required and one department appointed member. The committee shall meet monthly until sufficient classes for all categories of certification are approved. Thereafter the committee shall meet semi-annually or as required for the purpose of certification reviews of sponsors, courses and instructors and shall make recommendations to the secretary as to findings.~~

~~G. Approval of sponsors.~~

~~(1) All sponsors wishing to offer department-approved courses for credit must be approved by the secretary prior to accepting students.~~

~~(2) Educational institutions, proprietary schools, professional organizations, internet-based training providers or businesses wishing to become department-approved sponsors must submit an application for department approval.~~

~~(3) The department shall maintain a list of approved sponsors.~~

~~(4) An approved sponsor shall comply with the following requirements.~~

~~(a) Conduct all courses in accordance with department rules and regulations and education policies.~~

~~(b) Permit the department or its representative access to classes being conducted and make available to the department, upon request, all information pertaining to the activities of the sponsor.~~

~~(c) Advertise at all times in a manner free from misrepresentation, deception or fraud.~~

~~(d) Prominently display the current certificate of sponsorship in the main office of the sponsor as registered with the department.~~

~~(e) In the event a sponsor ceases operations while students are enrolled who have not completed their program of study, submit within thirty (30) days a list of students enrolled at the time of closure, the amount of tuition paid, the status of course work in progress and all other student records.~~

~~(f) Maintain current, complete and accurate student records and instructor critiques or summaries, which shall be accessible at all times to the department or its authorized representatives. These records shall include, but not be limited to, a record of payments made, a record of attendance and a record of course work completed.~~

~~(g) Conduct all courses in accordance with course content requirements approved by the department.~~

~~(h) Certify no student as successfully completing a pre-certification course unless the student has attended at least 75% of the classroom instruction and has passed the course.~~

~~(i) Certify no certificate holder as successfully completing approved certification or continuing education course unless they have attended at least 90% of the classroom instruction.~~

~~(j) Advise the department of change of address and telephone number.~~

~~(k) Reapply for sponsorship in event of change of majority ownership.~~

~~(l) Notify the department in writing of change of directorship.~~

~~(m) Renew sponsorship approval every three (3) years.~~

~~(5) Failure to comply with this rule may result in the loss of sponsor approval.~~

~~H. Approval of courses.~~

~~(1) All pre-certification and continuing education courses shall be approved by the secretary.~~

~~(2) All courses shall be offered in accordance with established department course content requirements.~~

~~(3) All approved courses are subject to periodic review by the department.~~

~~I. Approval of instructors.~~

~~(1) All instructors shall be approved by the secretary.~~

~~(2) All instructor candidates shall complete an application for department review.~~

~~(3) All instructor candidates must be prepared to make a minimum fifteen (15) minute presentation to the education steering committee.~~

~~(4) An approved instructor shall comply with the following requirements:~~

~~(a) conduct all classes in accordance with department rules and regulations and education policies;~~

~~(b) insure that all instruction is free from misrepresentation;~~

~~(c) instruct in accordance with department approved course content requirements;~~

~~(d) allow access to any class to any duly appointed representative of the department;~~

~~(e) renew approval biannually as prescribed by the department; instructor approval expires on December 31 of each even numbered year;~~

~~(f) certify to the sponsor a true and correct record of student attendance; and~~

~~(g) failure to comply with this section may result in the loss of instructor approval.~~

[20.7.3.904 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.905 TECHNICAL ADVISORY COMMITTEE: Technical product review and approval shall be in accordance with 9-7A-15 NMSA 1978.

[20.7.3.905 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05]

20.7.3.906 ADMINISTRATIVE ENFORCEMENT:

A. Any violation of these regulations is a petty misdemeanor subject to criminal penalties as authorized by NMSA 74-1-10.

B. The department may appear and prosecute any misdemeanor proceeding if the appearance is by an employee authorized by the secretary to institute or cause to be instituted an action on behalf of the department.

C. The secretary, at his discretion, may elect to pursue criminal or civil penalties, or both, for any violations of these regulations.

D. Upon any violation of these regulations, the department may:

(1) issue a compliance order stating the nature of the violation requiring compliance immediately or within a specific time period and assess a civil penalty for any past or current violation or both; or

(2) commence a civil action in district court for appropriate relief, including a temporary or permanent injunction.

E. Any penalty assessed in the compliance order for residential on-site liquid waste systems shall not exceed one hundred dollars ($100) for each violation.

F. Any penalty assessed in the compliance order for non-residential on-site liquid waste systems shall not exceed one thousand dollars ($1000) for each violation.

G. If a violator fails to achieve compliance within the time specified in the compliance order, the secretary shall assess civil penalties of not more than one thousand dollars ($1000) for each noncompliance with the order.

H. A compliance order issued pursuant to this section shall become final unless, no later than thirty (30) days after the compliance order is served, the party named in the order submits a written request to the secretary for a hearing.

I. All requests for hearings shall be in accordance with 20.7.3.406 NMAC.

J. Penalties collected pursuant to violations of 20.7.3 NMAC shall be deposited in the state treasury to be credited to the general fund.

K. Any noncompliance with any provision of 20.7.3 NMAC or any permit provision may be subject to penalties.

[20.7.3.906 NMAC - N, 9/1/05]

20.7.3.907 AUTHORITY TO DISCONNECT SOURCE OF WATER SUPPLY: After due process is provided, the department may disconnect the source of water supply to a commercial or residential unit that is served by any on-site liquid waste system that has become a failed system and that presents an imminent hazard to public health. This authority includes authority to disconnect power utilities if necessary to disconnect the source of water supply. The

department shall give notice of its actions to the unit owner and the tenants affected or as otherwise provided by the law.
[20.7.3.907 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05; A, 4/1/07]

20.7.3.908 through 20.7.3.1000 [RESERVED]

20.7.3.1001 CONSTRUCTION: 20.7.3 NMAC shall be liberally construed to carry out its purpose.
[20.7.3.1001 NMAC - Rp, 20.7.3.501 NMAC, 9/1/05]

20.7.3.1002 TEMPORARY PROVISIONS: All registration certificates, permits, orders, rulings and variances issued pursuant to the regulations in effect at the time such registration certificates, permits, orders, rulings, or variances were issued shall remain in full force and effect until repealed, replaced, superseded or amended pursuant to 20.7.3 NMAC.
[20.7.3.1002 NMAC - Rp, 20.7.3.502 NMAC, 9/1/05]

20.7.3.1003 SEVERABILITY: If any provision or application of 20.7.3 NMAC is held invalid, the reminder, or its application to other situations or persons, shall not be affected.
[20.7.3.1003 NMAC - Rp, 20.7.3.503 NMAC, 9/1/05]

20.7.3.1004 REFERENCES IN OTHER REGULATIONS: Any reference to the liquid waste treatment and disposal regulations in any other rule shall be construed as a reference to 20.7.3 NMAC.
[20.7.3.1004 NMAC - Rp, 20.7.3.504 NMAC, 9/1/05]

20.7.3.1005 SAVINGS CLAUSE: Repeal or supersession of prior versions of the liquid waste disposal regulations shall not affect any administrative or judicial action for the enforcement thereof.
[20.7.3.1005 NMAC - Rp, 20.7.3.505 NMAC, 9/1/05]

20.7.3.1006 COLLATERAL REQUIREMENTS: Compliance with 20.7.3 NMAC does not relieve any person from the responsibility of meeting more stringent city or county regulations or ordinances or other requirements of state or federal laws governing the treatment or disposal of liquid waste.
[20.7.3.1006 NMAC - Rp, 20.7.3.506 NMAC, 9/1/05]

20.7.3.1007 LIMITATIONS OF DEFENSE: The existence of a valid permit for installation or modification of an on-site liquid waste system shall not constitute a defense to a violation of any section of 20.7.3 NMAC except the requirement for obtaining a permit (20.7.3.401-404 NMAC).
[20.7.3.1007 NMAC - Rp, 20.7.3.507 NMAC, 9/1/05]

20.7.3.1008 to 20.7.3.1100 [RESERVED]

HISTORY OF 20.7.3 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the commission of public records - state records center and archives.
EIB 73-4, Liquid Waste Disposal Regulations, filed 9/19/73.
EIB 79-7-2, Liquid Waste Disposal Regulations, filed 8/7/79.
EIB/LWDR 1, Liquid Waste Disposal Regulations, filed 10/10/85.
EIB/LWDR 2, Liquid Waste Disposal Regulations, filed 12/19/89.

History of Repealed Material: 20 NMAC 7.3, Liquid Waste Disposal (filed 10-27-95) repealed 11-30-95.
20.7.3 NMAC, Liquid Waste Disposal (filed 1/09/04) repealed 9/01/05.

Other History:
EIB/LWDR 2, Liquid Waste Disposal Regulations (filed 12/19/89) renumbered, reformatted and replaced by 20 NMAC 7.3, Liquid Waste Disposal, effective 11/30/95.
20 NMAC 7.3, Liquid Waste Disposal (filed 10/27/95) replaced by 20 NMAC 7.3, Liquid Waste Disposal, effective 10/15/97.
20 NMAC 7.3, Liquid Waste Disposal (filed 10/27/97) renumbered, reformatted, amended and replaced by 20.7.3 NMAC, Liquid Waste Disposal, effective 3/01/04.
20.7.3 NMAC, Liquid Waste Disposal (filed 1/09/04) replaced by 20.7.3 NMAC, Liquid Waste Disposal and Treatment, effective 9/01/05.