

# Bernalillo County Wastewater Ordinance 2006-1



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**BERNALILLO COUNTY  
BOARD OF COUNTY COMMISSIONERS  
ORDINANCE NO. 2006-1**

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**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

SECTION 1. The Bernalillo County Code is hereby amended to include the following new language in Chapter 42, Division 10, replacing the previous Chapter 42, Division 10, Wastewater Systems, which is hereby repealed:

CHAPTER 42, DIVISION 10 WASTEWATER SYSTEMS

**Sec. 42.491. Purpose**

The installation and use of wastewater treatment and disposal systems should not adversely affect public health nor cause the degradation of ground or surface water. Ground water is a vital, finite natural resource that, if contaminated, can pose substantial risks to public health. In Bernalillo County, septic tank effluent has been determined to be a major cause of ground water contamination. The purposes of this wastewater ordinance are: (1) to protect public health and safety by minimizing the risk of further contamination to surface waters and ground water by wastewater systems; (2) to protect the quality of surface waters and ground water so that they will be available as a drinking water source for future generations; and (3) to prevent and abate public health hazards. This ordinance establishes minimum criteria for the design, installation, inspection, treatment, and management of commercial and domestic wastewater systems.

**Sec. 42-492. Applicability**

- A. This ordinance applies to all situations where commercial or domestic wastewater is collected, treated, or disposed of, including wastewater systems in existence prior to the effective date of this ordinance, unless the ordinance indicates otherwise.
- B. Functioning wastewater systems that were installed prior to the effective date of this ordinance and receive, or are designed to receive, 2000 gal/day or less of wastewater shall comply with Section 42-501, Operating Permit, Section 42-508, Performance Standards, Section 42-509, Design, and Section 42-511, Disposal, at the time they are modified or replaced, or by January 1, 2015, whichever occurs first. If a sewer system is available, the structure(s) shall connect to the sewer system as required in Section 42-498, Sewers.
- C. Functioning wastewater systems that were installed prior to the effective date of this ordinance and receive, or are designed to receive, more than 2000 gals/day shall comply with the requirements of this ordinance.
- D. If a sewer system is available, the structure(s) shall connect to the sewer system as required in Section 42-498, Sewers.
- E. Functioning wastewater systems that were installed prior to the effective date of this ordinance and receive, or are designed to receive, commercial wastewater shall comply with Section 42-501, Operating Permit, Section 42-508, Performance Standards, Section 42-509,

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1 Design, and Section 42-511, Disposal, at the time they are modified or replaced, If a sewer  
2 system is available, the structure(s) shall connect to the sewer system as required in Section  
3 42-498, Sewers.

4 F. Failing wastewater systems shall be brought into compliance with this ordinance, including  
5 the permit requirements, within 30 days of discovery of the failure occurring. During the  
6 interim the county may require that corrective actions be taken to mitigate damages.

7 G. The owner of a wastewater system shall operate and maintain the wastewater system in a  
8 manner approved by the county. In addition, no wastewater system shall be operated or  
9 maintained in violation of Section 42-493(D), General Conditions and Requirements. Every  
10 owner shall be responsible for the storing, treating and disposing of wastewater generated on  
11 that property.  
12

13 **Sec. 42-493. General Conditions and Requirements**

14 A. Where plumbing fixtures exist in a building which is not connected to a sewer system,  
15 suitable provisions shall be made for the treatment and disposal of the wastewater by  
16 methods satisfactory to the county, as set forth in this ordinance. The system shall provide  
17 final effluent that complies with the applicable standards as set forth in this ordinance and the  
18 components of a system shall be constructed of materials approved by the county.

19 B. Bernalillo County shall not issue a building permit or a commercial plumbing permit  
20 (includes all technical code permits) for any building that requires the use of a wastewater  
21 system unless the owner has received approval from the county. A building shall not be  
22 occupied and the county shall not authorize occupancy until the county approves the  
23 installation of, and issues the operating permit for, the wastewater system. Bernalillo County  
24 shall not approve any change in occupancy classification or commercial tenancy of a building  
25 that uses a wastewater system until the county has reviewed the use of the wastewater system  
26 with the proposed change, and has approved of the change. The county shall not issue a  
27 business license until the county has reviewed the application and determined that the use of  
28 the wastewater system complies with the requirements of this ordinance.

29 C. No person shall perform a site characterization or system evaluation, or install, modify,  
30 service, abandon, or maintain any portion of a wastewater system without first being deemed  
31 qualified by the county to perform such work.

32 D. No person shall install, modify, own, operate, or use a wastewater system that, by itself or in  
33 combination with other wastewater systems, causes a hazard to public health or degrades any  
34 body of water. Compliance with any of the requirements of this ordinance does not preclude  
35 the imposition by the county of additional or more stringent requirements necessary to  
36 prevent a hazard to public health or the degradation of a body of water.

37 E. In the event this ordinance is amended or a new wastewater ordinance is adopted, those  
38 applications for which a permit or approval has not been issued shall meet the requirements  
39 of the amended or new ordinance.

40 F. Where the provisions of this ordinance impose greater restrictions than those of any other  
41 ordinance the provisions of this ordinance shall prevail. Where the provisions of any other  
42 applicable state or local regulation, ordinance, or code imposes a greater restriction than those  
43 of this ordinance, the provisions of such other applicable state or local regulation, ordinance,  
44 or code shall prevail.

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- 1 G. The type of on-site wastewater system shall be determined on the basis of site location, lot  
2 size, soil, site characteristics and design flow. The system, except as otherwise approved,  
3 shall consist of a wastewater treatment unit and associated disposal system.
- 4 H. All disposal systems that utilize subsurface discharge and soil absorption shall be designed  
5 with an unobstructed replacement area so that additional subsurface absorption areas  
6 equivalent to at least 100% of the required original disposal system may be installed if the  
7 original system cannot dispose of all the wastewater. No division of a lot or construction or  
8 remodeling of a permanent structure on the lot shall be made if such division, construction or  
9 remodeling impairs the usefulness of the 100% replacement area.

10  
11 **Sec. 42-494. Prohibitions and Limitations**

- 12 A. Except as otherwise provided in this ordinance, effluent from a wastewater system that does  
13 not meet the performance standards set forth in Section 42-508, Performance Standards, is  
14 prohibited. The performance standards for effluent shall be met at the end of the treatment  
15 component.
- 16 B. The use of a cesspool as a wastewater system is prohibited, including any cesspool existing  
17 prior to the effective date of this ordinance.
- 18 C. The use of a privy as a wastewater system is prohibited, including any privy existing prior to  
19 the effective date of this ordinance.
- 20 D. The discharge of wastewater by means of plumbing outfall pipes to the ground surface is  
21 prohibited, including outfall pipes existing prior to the effective date of this ordinance.
- 22 E. The discharge of untreated wastewater to the ground surface, surface water, or ground water  
23 is prohibited.
- 24 F. In no event shall the county approve the installation or modification of a wastewater system  
25 if the property is being occupied or used in violation of applicable local, land-use planning,  
26 or zoning and building requirements.
- 27 G. Wastewater systems shall not be installed in a floodplain.
- 28 H. Disposal of septage shall not cause a hazard to public health nor degrade a body of water.  
29 Transport and disposal of septage shall be in conformance with applicable federal, state and  
30 local regulations/ordinances.

31  
32 **Sec. 42-495. Limitations of Responsibility**

33 The issuance of a permit or approval shall not be construed as an assumption by the county of  
34 any responsibility for the wastewater system or any component of the system.

35  
36 **Sec. 42-496. Rules and Ordinances**

37 The county may adopt rules and ordinances to implement or augment this ordinance.

38  
39 **Sec. 42-497. Definitions**

40 As used in this ordinance, unless the context indicates otherwise:

41 "*Absorption surface*" means the total surface area of soil at the bottom of the disposal field  
42 plus the side-wall area in excess of (6) inches and not to exceed thirty six (36) inches below the  
43 leach line. The absorption surface area for gravelless systems shall be calculated in the same  
44 manner.

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1        “*Advanced treatment*” means any process of wastewater treatment that removes a greater  
2 amount of contaminants than is accomplished through primary treatment; advanced treatment  
3 may include physical or chemical processes.

4        “*Aerobic treatment unit*” means a wastewater treatment unit that can maintain at least two (2)  
5 mg/l dissolved oxygen on a continuous basis to provide aerobic biochemical stabilization within  
6 the treatment receptacle and any additional oxygen to provide mixing.

7        “*Aggregate*” means clean washed gravel (no greater than 4% fines by weight), clean crushed  
8 rock, proprietary or other media reviewed by the technical advisory committee and approved by  
9 the county; aggregate shall have a minimum size of ¾ inch and a maximum size of 2 ½ inches  
10 and provide no less than 35% void space under field conditions; the aggregate shall be durable,  
11 inert, and shall have a hardness value of 3 or more on the Mohs scale of hardness so it will  
12 maintain its integrity, not collapse or disintegrate with time, and not be detrimental to the  
13 performance of the system.

14        “*Alternative disposal*” means any approved on-site wastewater disposal method used in lieu  
15 of, including modifications to, a conventional disposal method; these include but are not limited  
16 to, mounds, evapotranspiration beds and pressure dosed systems.

17        “*American Society for Testing and Materials*”, or “*ASTM*”, is a technical society which  
18 develops and publishes national standards for the testing and quality assurance of construction  
19 materials.

20        “*Approved*” means:

- 21        1. A wastewater system that was permitted, constructed and installed in compliance with  
22 the standards and requirements of this ordinance and has an operating permit; or
- 23        2. A wastewater system component or product approved by the county; or
- 24        3. A person or entity approved by the county to design, install, modify, or maintain  
25 wastewater systems or a person approved by the county to perform site or wastewater  
26 system evaluations.

27        “*Arroyo*” means a dry wash or draw that flows occasionally, a watercourse (as a creek or  
28 stream) in an arid region, or a water carved gully or channel.

29        “*Authorized representative*” means the person designated by the property owner to act on his  
30 behalf in the application process.

31        “*Available*”, as applied to a public sewer system, means a serviceable sewer line, as  
32 determined by the utility, which is capable of being connected to the plumbing of an  
33 establishment or residence, and has adequate capacity to accept the wastewater generated by the  
34 establishment or residence; and:

- 35        1. For an existing residential subdivision lot, single-family residence, or establishment,  
36 where there exists a sewer or lift station in a public easement or right-of-way that abuts  
37 the property line of the parcel or is within 200 feet of the property line and can be  
38 accessed via rights-of-way or easements; or
- 39        2. Within areas used for commercial, industrial, or manufacturing purposes or its  
40 equivalent, a sewer exists within 500 feet of the property line and can be accessed via  
41 rights-of-way or easements; or
- 42        3. For proposed residential subdivisions with five (5) or fewer lots, there exists a sewer  
43 or lift station in a public easement or right-of-way that abuts the subdivision or is

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1 within 400 feet of any lot in the subdivision and can be accessed via rights-of-way or  
2 easements; or

- 3 4. For proposed residential subdivisions with more than five (5) lots and for proposed  
4 subdivisions to be used for commercial, industrial, or manufacturing purposes, or its  
5 equivalent, there exists a sewer system or project (that may or may not be under  
6 construction) that is within 1,000 feet of any lot in the subdivision and can be accessed  
7 via rights-of-way or easements.

8 "*Bedroom*" means a room designed for sleeping or a room that could be used to provide  
9 sleeping accommodations.

10 "*Biochemical oxygen demand (BOD)*" means the rate at which organisms use the oxygen in  
11 water or wastewater while stabilizing decomposable organic matter under aerobic conditions.

12 "*Blackwater*" means that part of domestic wastewater carried off by toilets, urinals, kitchen  
13 drains and utility sinks. The term also includes laundry waste from the washing of material  
14 soiled with human excreta.

15 "*Body of water*" means all constrained water including water situated wholly or partly within  
16 or bordering upon Bernalillo County, whether surface or subsurface, public or private.

17 "*Building sewer*" means that portion of the horizontal piping of a drainage system which  
18 extends from the end of the building drain located two (2.0) feet outside the building wall, and  
19 which receives the wastewater discharge from the building drain and conveys it to a wastewater  
20 treatment unit or approved point of disposal.

21 "*Canal*" means a man-made ditch or channel that carries water for purposes other than  
22 domestic consumption.

23 "*Cesspool*" means an unlined or a lined and covered excavation in the ground that is not  
24 watertight and receives wastewater or other organic wastes. It is designed to retain the organic  
25 matter and solids, but permits the liquids to seep through the bottom and sides.

26 "*Clay*" means:

- 27 a soil separate consisting of particles 0.002 millimeters in diameter; or  
28 the textural class name of any soil that contains 40% or more clay, less than 45% sand and  
29 less than 30% silt.

30 "*Cluster system*" means a wastewater system that serves more than one lot and is designed to  
31 treat 2000 gallons per day or less of wastewater.

32 "*Coarse sand*" means soil comprised of 25% or more of soil particles 0.5 to 2.0 mm in  
33 diameter and less than 50% of any other grade of sand.

34 "*Commercial wastewater*" means wastewater, whether treated or untreated, that exceeds 300  
35 mg/l BOD, 300 mg/l TSS, 80 mg/l total nitrogen or 105 mg/l fats, oil and grease.

36 "*Conventional disposal*" means a subsurface soil absorption system with gravity distribution  
37 of the effluent, with or without a lift station, constructed in accordance with the standards set  
38 forth in this ordinance, including trench or bed absorption areas and seepage pits.

39 "*Conventional treatment*" means a septic tank where primary treatment occurs.

40 "*Conventional treatment system*" means an on-site wastewater system utilizing both  
41 conventional treatment and conventional disposal.

42 "*Commercial wastewater*" means non-toxic wastewater and includes, but is not limited to,  
43 commercial and institutional food operations, commercial laundry facilities with no more than  
44 four (4) machines, and animal holding facilities.

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1       "*Community system*" means a wastewater system that serves more than one lot and is  
2 designed to treat more than 2000 gallons per day of wastewater.

3       "*County*" means Bernalillo County Environmental Health.

4       "*County Manager*" means the County Manager of Bernalillo County or his designated  
5 representative(s).

6       "*D-box*" means a watertight distribution box with a single inlet and several individual outlets  
7 used to divide the wastewater effluent flow among multiple distribution lines.

8       "*Days*" means calendar days unless otherwise indicated.

9       "*Degrade a body of water*" means to reduce the physical, chemical, or biological qualities of a  
10 body of water and includes but is not limited to, the release of material that could result in the  
11 exceeding of standards established by 20.6.4 NMAC, Standards for Interstate and Intrastate  
12 Surface Waters, by 20.6.2 NMAC, Ground and Surface Water Protection and 20.7.10 NMAC,  
13 Drinking Water.

14       "*Department*" means the Bernalillo County Zoning, Building, Planning & Environmental  
15 Health Department

16       "*Design flow*" means the flow rate for which an on-site wastewater system must be designed  
17 in order to assure acceptable system performance, assuming the use of conventional plumbing  
18 fixtures.

19       "*Designer*" means the person or entity responsible for designing the wastewater system and  
20 certifying the installation of the system.

21       "*Director*" means the Bernalillo County Zoning, Building, Planning & Environmental Health  
22 Department Director, or in the director's absence, the person designated to act as the director  
23 during his absence.

24       "*Discharge plan*" means the discharge plan as defined and issued by the New Mexico  
25 Environment Department, Ground Water Quality Bureau.

26       "*Disinfected*" or "*disinfection*" means the use of any process designed to effectively kill most  
27 micro-organisms contained in wastewater effluent, including essentially all pathogenic (disease  
28 causing) organisms, as indicated by the reduction of the fecal coliform concentration to a specific  
29 level; these processes include, but are not limited to, the use of chlorine, ozone, and ultraviolet  
30 light.

31       "*Disposal System*" means the dispersal of effluent through a system of open-jointed or  
32 perforated piping, approved alternative distribution units, or other disposal facilities designed to  
33 distribute effluent for filtration, oxidation and absorption by the soil within the upper zone of the  
34 soil or a system which is used to evaporate the effluent.

35       "*Disposal area*" means the area of absorption surface.

36       "*DO*" means dissolved oxygen.

37       "*Domestic wastewater*" means wastewater that does not exceed 30 mg/l BOD, 30 mg/l TSS,  
38 80 mg/l total nitrogen or 105 mg/l fats, oils and grease.

39       "*Drainage ditch*" means an unlined trench dug for the purpose of draining water from the  
40 land or for transporting water for use on the land.

41       "*Drainline*" means a perforated pipe or other materials used to discharge wastewater effluent  
42 to the disposal system"

43       "*Dwelling unit*" means a room or suite of rooms with kitchen and bath facilities designed as a  
44 unit for occupancy by one family.

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1       *"Easement"* means the right or privilege that a person or persons may have in another's land,  
2 such as right of passage; commonly associated with road and utility corridors.

3       *"Edge of a water course, canal or arroyo"* means that point of maximum curvature at the  
4 upper edge of a definite bank or, if no definite bank exists, the highest point where signs of  
5 seasonal high water flow exist.

6       *"Effluent"* means the discharge from the final treatment unit.

7       *"Effluent disposal wells"* means a prohibited method of disposal consisting of a drilled,  
8 driven or bored shaft or dug hole with depth greater than any surface dimension, used for  
9 subsurface emplacement of wastewater, including, but not limited to, abandoned water supply  
10 wells, irrigation wells and test holes, but excluding seepage pits used as disposal systems.

11       *"Engineer"* means a professional engineer licensed in the State of New Mexico.

12       *"Establishment"* means multi-family housing, an apartment, a condominium or townhouse  
13 complex, a mobile home park or recreational vehicle park, a commercial or institutional  
14 development, or places of business or assembly. An establishment includes all buildings or  
15 structures and the land pertaining thereto.

16       *"Existing lot"* means a lot in existence prior to the effective date of this ordinance.

17       *"Existing system"* means a wastewater system in existence prior to application submittal.

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

27       *"Failure"* or *"failing"* describes a wastewater treatment or disposal system which results in the  
28 discharge of effluent that does not meet the requirements of this ordinance.

29       *"Fecal coliform"* means bacteria used as an indicator organism and its presence is taken as an  
30 indication that pathogenic organisms may be present.

31       *"Flood plain"* means any area that could be flooded by high water from a 100-year frequency  
32 storm.

33       *"Functioning wastewater system"* means a wastewater system that is operating as designed  
34 and as permitted by the county. Systems installed prior to the effective date of this ordinance  
35 shall, at a minimum, meet Class 1 Standards as shown in Table 1, Performance Standards.

36       *"Gravels"* means, for purposes of soils classification, a soil separate consisting of particles  
37 greater than 2 mm in diameter.

38       *"Graywater"* means that part of domestic wastewater that is not blackwater.

39       *"Ground water"* means interstitial water that occurs in saturated earth material.

40       *"Hazard to public health"* means the indicated presence, in water or soil, of chemical,  
41 biological, or other agents under such conditions that they may adversely impact human health or  
42 safety.

43       *"Holding component"* means a watertight receptacle constructed to contain wastewater. It  
44 does not mean holding tanks installed in recreational vehicles.

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1        "*Holding tank*" means a non-discharging watertight tank designed to receive and temporarily  
2 retain wastewater for periodic pumping and disposal. It does not mean holding tanks installed in  
3 recreational vehicles.

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

8        "*Hydraulic flow*" means volume per unit time.

9        "*Hydraulic loading rate*" means the amount of material applied to a wastewater or disposal  
10 component per unit area or unit volume.

11        "*Imminent hazard to public health or safety*" means any situation with the potential to  
12 immediately and adversely impact or threaten public health or safety.

13        "*Industrial process wastewater*" means toxic wastewater, excepting the following; human  
14 excreta; used water from showers, washbasins and dishwashers; and food preparation waste; any  
15 wastewater generated in a commercial activity that contains the materials prohibited by  
16 Subsection A of 20.7.3.304 NMAC is industrial process wastewater.

17        "*Installer*" means the person responsible for installing or modifying a wastewater system. An  
18 installer shall obtain an installer's certificate as described in Sec. 42-499, Certification.

19        "*Inspector*" means a person certified by the State of New Mexico Environment Department  
20 to be competent in the physical examination and evaluation of on-site wastewater systems.

21        "*Invert*" means the lowest portion of the internal cross section of a pipe or fitting.

22        "*Limiting layer*" means an impervious formation, a type Ia or type IV soil described in Table  
23 4, bedrock or seasonal high ground water table.

24        "*Liner*" means a manufactured substance that restricts seepage to no more than  $10^{-7}$  cm/sec.  
25 Over the design service life of the lined unit; manufactured liners must have a minimum single-  
26 ply thickness of 20 mils and have no leaks.

27        "*Load*" or "*loading*" means the biological or chemical load received by a wastewater system;  
28 calculated as flow times concentration.

29        "*Lot*" means a legal lot of record as described in a Bernalillo County subdivision ordinance.

30        "*Lot size*" means the area of a parcel excluding those private and public road easements and  
31 roadways which have been legally recorded. Lot size shall be measured to the nearest hundredth  
32 of an acre.

33        "*Maintenance contract*" means a contract between the wastewater system owner and a  
34 maintenance service provider in which the maintenance service provider agrees to provide  
35 periodic inspections in regards to the operation, maintenance and repair of the system.

36        "*Maintenance service provider*" means a public entity, company or individual in the business  
37 of maintaining wastewater systems according to manufacturers' specification.

38        "*May*" means discretionary, permissive or allowed.

39        "*Management plan*" indicates how a system shall be operated and maintained.

40        "*Modification*" or "*modify*" means

- 41           1. To change the method of wastewater treatment or disposal;
- 42           2. To increase the size of a wastewater system;
- 43           3. To alter the horizontal or vertical location of the wastewater system;

**CONTINUATION PAGE 9: ORDINANCE NO. 2006-1**

**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

- 1           4. To increase the amount of design flow or load received by the wastewater system
- 2           above the original design flow or load;
- 3           5. To remove or replace component materials in a disposal system; or
- 4           6. To change the size or boundaries of a lot which contains a wastewater system so that
- 5           the total design flow for the lot exceeds the total design flow limitations

6           "*MPN*" means Most Probable Number of organisms present.

7           "*Native soil*" means unsaturated soil which has been deposited onto a site by the actions of

8 nature and which has not been significantly disturbed or altered by the activities of man.

9           "*Non-discharging system*" means a watertight on-site wastewater system that does not

10 discharge to the soil, including, but not limited to, holding tanks and lined evapotranspiration

11 systems.

12           "*Obstructed land*" are those areas on a lot or property used for such purposes as pools,

13 concrete slabs, buildings, driveways, parking and similar areas which prohibit, hinder, or affect

14 the installation, operation, or maintenance of a wastewater system.

15           "*Onsite system*" means a wastewater system that is wholly located on a single lot and only

16 serves structures on that lot.

17           "*Operating permit*" means a permit, issued by the county, which allows the operation of the

18 wastewater system.

19           "*Operator*" means the person who owns a wastewater system designed to treat 2000 gal/day

20 or less, or the person who operates a wastewater system treating over 2000 gal/day.

21           "*Ordinance*" means Division 10 of Chapter 42, Health and Sanitation, of the Bernalillo

22 County Code unless otherwise indicated.

23           "*Owner*" is the legal owner(s) of the property.

24           "*Partially treated wastewater*" means wastewater that does not meet Class 1 Standards as

25 shown in Table 1, Performance Standards.

26           "*Performance standards*" means specific conditions or standards that shall be achieved.

27 Performance standards define the end result, but not the means of achieving it.

28           "*Permittee*" means the individual, firm, partnership, or corporation duly licensed or authorized

29 by the Construction Industries Division of the State of New Mexico and approved by the county

30 to install a wastewater system.

31           "*Person*" means any individual, partnership, firm, public or private corporation, association,

32 trust, estate, governmental entity, agency or institution, any other legal entity or their legal

33 representatives, agents, or assigns.

34           "*Potable water*" is water used for drinking, culinary or domestic purposes.

35           "*Potable water line*" means any water line that is connected to a potable water supply source.

36 The term does not include an irrigation line with any of the following types of backflow devices:

- 37           1. Irrigation systems into which chemicals are not injected, any atmospheric or pressure
- 38           vacuum breaker, or double check valve, or detector check assembly; or
- 39           2. Irrigation systems into which chemicals such as fertilizers, pesticides, or herbicides are
- 40           injected, any reduced pressure backflow preventer.

41           "*Privy*" means a receptacle for non-liquid-carried excreta which is directly discharged to the

42 soil.

43           "*Product*" means a combination of components comprising a unit which treats or disposes of

44 wastewater.

**CONTINUATION PAGE 10: ORDINANCE NO. 2006-1**

**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

1        "*Public sewer*" means a sewer system owned or operated by a governmental or quasi-  
2 governmental agency.

3        "*Replacement area*" means an area within a lot designated to allow future construction of a  
4 replacement disposal system.

5        "*Residence*" means a structure that contains four (4) or fewer dwelling units.

6        "*Sand*" means:

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

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

11        "*Scum*" means the accumulated floating solids generated during the biological, physical or  
12 chemical treatment, coagulation, or sedimentation of wastewater.

13        "*Seasonal high ground water table*" means the highest level to which the upper surface of  
14 ground water may be expected to rise within twenty-four (24) consecutive months. Seasonal  
15 high ground water levels shall be determined by the county and shall be based on the best  
16 documented evidence available to the county at the time of installation or modification.

17        "*Secondary treatment*" means a wastewater treatment process used to convert dissolved or  
18 suspended materials into a form more readily separated from the water being treated; the process  
19 is commonly a biological treatment process followed by settling and clarification resulting in a  
20 reduction of the 5-day biochemical oxygen demand (BOD5) and total suspended solids (TSS)  
21 concentrations to a level specified in Table 1.

22        "*Seepage pit*" means a type of absorption system that uses a vertical, cylindrical, underground  
23 receptacle so constructed as to allow the disposal of effluent by soil absorption through its walls.

24        "*Septage*" means a mixture of sludge (solids separated from liquids), fatty materials, human  
25 feces, and wastewater removed during the pumping of a wastewater treatment unit.

26        "*Septic tank*" means a watertight receptacle constructed to promote separation of solid  
27 (sludge), liquid (supernatant), and scum components of wastewater, to provide limited digestion  
28 of organic matter, to store solids, and to allow clarified liquid to discharge for further treatment  
29 and disposal.

30        "*Setback distance*" means the distance measured by a straight horizontal line between the  
31 on-site liquid waste system, its designated replacement area, or portion thereof, and the object  
32 being considered.

33        "*Settleable Solids*" are those solids that will settle to the bottom of an Imhoff Cone in a 60-  
34 minute period.

35        "*Sewer system*" or "*sewer*" means a wastewater collection system which includes, but is not  
36 limited to: the trunks, arterials, channels, conduits, manholes, pumps, pumping stations, piping,  
37 and other appurtenances necessary to collect wastewater from a community, water district,  
38 corporation, company, or other entity that produces domestic sewage or a majority of domestic  
39 sewage mixed with other wastewaters treatable in a wastewater treatment facility

40        "*Shall*" means mandatory.

41        "*Silt*" means:

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

**CONTINUATION PAGE 11: ORDINANCE NO. 2006-1**

**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

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

3 "*Soil*" means sediment or other unconsolidated accumulations of mineral particles that may  
4 or may not contain organic material and that have filtering properties;

5 "*Startup*" means the period of time needed for the wastewater system to become functional.

6 "*Subdivision*" means the division of a surface area of land, including land within a previously  
7 approved subdivision, into two (2) or more parcels for the purpose of sale, lease or other  
8 conveyance or for building development, whether immediate or future.

9 "*Suitable soil*" means a soil, whether naturally occurring or introduced, that will treat the  
10 primary effluent effectively and act as an effective filter and remove organisms and suspended  
11 solids prior to the effluent reaching ground water, bedrock or a limiting layer, and that will  
12 provide adequate transmission to prevent a failed system . Suitable soils are classified as type Ib,  
13 II, or III soils as classified in Table 4.

14 "*Surface water*" means a recognizable body of water, including swamp or marsh areas and  
15 natural or constructed ponds contained within a recognizable boundary. This does not include  
16 retention or detention areas designed to contain standing or flowing water for less than 72 hours  
17 after a rainfall.

18 "*System*" means a wastewater system.

19 "*System evaluator*" means the person who is capable of evaluating a system to determine  
20 functionality and has demonstrated competence in the inspection of wastewater systems.  
21 Certification by the national association of waste transporters (NAWT), NSF international or a  
22 county approved program is demonstration of competence in the inspection of conventional  
23 treatment and disposal systems.

24 "*Tank*" means a watertight receptacle constructed to contain wastewater.

25 "*Temporary*" means a single period or an accumulation of periods in one location not  
26 exceeding 120 total days in any 365-day period for recreational use and not exceeding 30 total  
27 days in any 365-day period for other uses except as stated otherwise in this ordinance.

28 "*Tertiary treatment*" means additional treatment beyond secondary treatment standards,  
29 specifically, the reduction in the total nitrogen concentration;

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

35 "*Total flow*" means the sum of the design flows for all wastewater systems on a lot.

36 "*Total nitrogen*" or "*TN*" means the combined organic nitrogen, ammonia, nitrite and nitrate  
37 contained in the wastewater or effluent;

38 "*Toxic*", "*hazardous*", or "*industrial wastewater wastes*" include, but are not limited to:  
39 wastewater carried off by floor drains, utility sinks, and equipment drains located in buildings in  
40 industrial or manufacturing areas, wastewater from commercial laundry facilities with more than  
41 four (4) self-service machines, and wastewater resulting from car and truck washes.

42 "*Treatment component*" means a product which is a component of the wastewater system  
43 where removal, reduction, or alteration of the objectionable constituents of wastewater is  
44 designed to occur. It may include a holding component but does not include native soil.

**CONTINUATION PAGE 12: ORDINANCE NO. 2006-1**

**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

1 "TSS" means Total Suspended Solids, which are those solids that did not settle but remained  
2 suspended in the solution and can be filtered.

3 "UL" means Underwriters Laboratory.

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

9 "Variance" means an administrative procedure authorizing the issuance of a permit or use of  
10 a system that does not meet the specific requirements of this ordinance but which meets the  
11 intent of the ordinance.

12 "Wastewater" means the liquid- or water-carried wastes removed from residences, institutions  
13 and other establishments, including bath and toilet wastes, laundry waste, and kitchen waste but  
14 not including toxic, hazardous, or industrial waste.

15 "Wastewater system permit" means a permit, issued by the county, which allows the  
16 construction and operation of a wastewater system.

17 "Wastewater system" means a system that collects, treats, or disposes of wastewater and is  
18 not subject to a National Pollutant Discharge Elimination System (NPDES) permit. This  
19 includes, but is not limited to: a subsurface, surface, mound or other disposal system; a holding  
20 tank; an aerobic treatment unit or other treatment unit; a graywater system tank; a septic tank; a  
21 grease interceptor; a dosing tank; a solids or effluent pump; a waterless, incinerating, or organic  
22 waste-composting toilet; or other treatment system.

23 "Water table elevation" means the upper surface of the ground water or that level below  
24 which the soil or underlying rock material is saturated with water. Water table elevation is  
25 measured from the soil surface downward to the upper level of saturated soil or to the free water  
26 level.

27 "Watertight" means the seepage from the tank or unit shall be no more than 0.01 gallons per  
28 square foot of submerged area per day.

29  
30 **Sec. 42-498. Sewers**

31 A. If a public sewer system is available, any new structure requiring wastewater disposal shall  
32 be connected to the sewer system prior to the structure being occupied. If a public sewer  
33 system is available to a proposed subdivision, every lot in that subdivision shall, at the  
34 property line of each lot, be provided access to sewer.

35 B. Any lot that has a structure that, has, or is generating wastewater shall be connected to the  
36 sewer system within one year (365 calendar days) of the availability of sewer.

37 1. Exceptions:

38 a. A failing wastewater system shall be abandoned and the structure shall be connected  
39 to sewer within 30 days of the wastewater system's failure.

40 b. Within 30 days of the ownership of the property changing, the structure shall be  
41 connected to sewer.

42 c. Wastewater systems that were installed prior to the sewer system becoming available  
43 and meet the requirements of Section 42-508, Performance Standards, without a  
44 variance, are not required to connect to the sewer system until the system fails.

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**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

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**Sec. 42-499. Certification**

All State of New Mexico Environment Department certification requirements and criteria shall apply in Bernalillo County.

**Sec. 42-501. Operating Permit**

- A. The operation of a wastewater system shall not commence until the county has issued the operating permit to the owner of the property where the system is located. For new or modified systems, the wastewater system permit shall also serve as the operating permit. In all other instances the owner shall submit to the county, in a format prescribed by the county, an operating application.
- B. EXISTING CONVENTIONAL SYSTEM: An operating permit for an existing conventional system, shall be issued if:
  - 1. The owner has agreed to have the septic tank pumped as specified in the management plan;
  - 2. The county has received a letter from the owner indicating that the owner has informed the occupant, if different than the owner, how to properly operate the system; and
  - 3. A system evaluator has declared the system to be performing adequately, completed the required County documentation, and the county has given the system inspection approval.
- C. EXISTING ALTERNATIVE SYSTEM: For existing alternative wastewater systems the owner shall have a valid maintenance contract in place at all times. The operating permit shall be issued if:
  - 1. The owner will continually have a maintenance person under contract, and the contract has been submitted to the county;
  - 2. The county has received a letter from the owner indicating that the owner has informed the occupant, if different than the owner, how to properly operate the system;
  - 3. A system evaluator has declared the system to be performing sufficiently, completed the required County documentation, and the county has given the system inspection approval.

**Sec. 42-502. Wastewater System Permit**

- A. PERMIT REQUIREMENTS: The installation or modification of a wastewater system shall not commence or continue unless the installer possesses a valid wastewater system permit as provided in this ordinance.
  - 1. A wastewater permit is required for:
    - a. The installation of a wastewater system; or
    - b. The modification of a wastewater system; or
    - c. The replacement or addition of a wastewater treatment, holding, or disposal component.
  - 2. A permit is not required for servicing or for replacing mechanical or electrical parts of an approved wastewater system with like kind parts; pumping of septage from a system; or making minor structural corrections. (such as baffles, observation ports, risers, filters, valves, pumps or D-boxes)
  - 3. The applicant shall be responsible for all information supplied to the county. The signed application, site evaluation, system design plans, and other information submitted with

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**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

1 the application serve as the basis upon which the county determines the issuance or denial  
2 of a permit.

3 B. APPLICATION AND SUBMITTALS FOR WASTEWATER SYSTEM PERMIT: The  
4 application shall be made in a format prescribed by the county. An application shall not be  
5 deemed complete until all information outlined below is provided. The application, plans  
6 and specifications, and other documentation submitted for review shall be clear, legible, and  
7 of a permanent nature. The owner's name and the site address shall be noted on all  
8 documents submitted to the county.

9 1. Application. The property owner or the authorized representative, shall submit the  
10 application to the county. An application shall be completed in full, signed by the owner  
11 or the owner's authorized representative, and accompanied by all required exhibits and  
12 fees. If the owner of a property uses an authorized representative, a signed statement  
13 from the owner of the property assigning authority for the representative to act on the  
14 owner's behalf during the application review process shall accompany the application.

- 15 a. The owner's name, address, and phone number;
- 16 b. The designer's name, address, phone number;
- 17 c. The site address;
- 18 d. The legal description;
- 19 e. The Uniform Property Code for the lot;
- 20 f. The signature of the person who is responsible for the design and installation of the  
21 wastewater system together with the date of signature. If the designer is required by  
22 this ordinance to be a professional engineer, the engineer's license number shall also  
23 be noted on the plans.

24 2. Plans and Specifications. Plans and specifications for all installations and modifications  
25 shall be submitted to the county and shall include, but not be limited to, the following:

- 26 a. Details and configuration layouts depicting how the design is to be constructed and  
27 how the design is to perform relative to the treatment, disposal, or holding of  
28 wastewater; and
- 29 b. Specifications including a description of the materials to be used.

30 3. Site Plan. All information that is necessary to determine the total wastewater flow and  
31 proper setbacks shall be submitted with the application.

- 32 a. The site plan showing boundaries with dimensions, locations of any existing or  
33 proposed residences, buildings, swimming pools, recorded easements, the wastewater  
34 treatment and disposal system components; the slope of the area where the  
35 wastewater system will be located; the replacement area; any existing or proposed  
36 wells, potable and non-potable water lines (including valves), drainage features, filled  
37 areas, obstructed areas; and surface waters. If the lot is five acres or greater, the  
38 applicant may draw a minimum one acre portion showing all required features. The  
39 applicant shall also show the location of that one-acre or larger portion inside the total  
40 site. The distance from the wastewater treatment system to each of the pertinent  
41 features shall be shown on the site plan. If the features are within 100 feet of the  
42 wastewater system, the actual or estimated distance to the feature shall be shown.  
43 The location of any public drinking water well within 200 feet of the wastewater  
44 system shall also be shown, with the distance indicated from the system to the well.

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**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

- 1           The applicant shall be responsible for the measurements to all features, including the  
2           pertinent features within 100 feet of the wastewater system. Minimum scale of the  
3           site plan shall be one (1) inch equals twenty feet.
- 4        b.     The north arrow.
- 5        4.     Floor Plans showing the number of bedrooms, the number of sinks and toilets, the  
6           building sewer, and any additional information as appropriate shall be shown on the site  
7           plan.
- 8        5.     The layout of the proposed wastewater system shall be staked on the property with each  
9           item identified. Each corner of the disposal field shall be staked.
- 10       6.     Site Evaluation. The determination of suitability of a lot, property, or subdivision for the  
11           use of a wastewater system shall be by persons approved by the county.
- 12        a.     Completed field data from each test pit and results of the site evaluation shall be  
13           submitted with the application.
- 14        b.     The address shall be clearly posted at the site and the location of the test pits and  
15           wastewater systems components staked on the ground surface.
- 16        c.     If ground water is encountered in the test pit, the water table elevations that exist at  
17           the time of the site evaluation shall be submitted. Water table elevations shall be  
18           established from a benchmark or other fixed point of reference located on the property  
19           or within reasonable proximity to it. The existing property elevation at the site of  
20           each soil profile shall also be recorded relative to the benchmark or fixed point of  
21           reference.
- 22        7.     Management Plan. A management plan shall be submitted with each application. The  
23           plan shall address the inspection and maintenance procedures for all mechanical and  
24           electrical components of the wastewater system.
- 25        8.     Fees. The application fee shall be paid prior to or at the time the application is accepted  
26           for review by the county.
- 27        9.     Supporting Data and Information. Sufficient data and information to determine if the  
28           proposed wastewater system or modification of an existing wastewater system will meet  
29           the requirement of this ordinance shall accompany all applications submitted for review.
- 30        10.    A signed copy of the maintenance contract for secondary or tertiary systems. This  
31           contract shall be signed by all parties affected and shall be submitted to the county prior  
32           to issuance of a permit; and
- 33        11.    Commercial Waste. The county may require that the plans for a wastewater system  
34           treating commercial wastewater be designed and submitted to the county for review under  
35           the seal of a professional engineer licensed in the State of New Mexico. Floor plans for  
36           the structure(s), square footage of the structure(s), and the occupant loads per area of use  
37           shall be submitted. Also, the minimum and maximum daily hydraulic flow, and the  
38           influent BOD and Total Nitrogen load associated with the wastewater to be treated.
- 39    C.    REVIEW OF APPLICATION: The county shall review the application and submittals, and  
40           perform at least one site visit. The county shall respond to a community system or Discharge  
41           Plan application within 60 business days after receiving the completed application and  
42           associated fees. The county shall respond to wastewater applications for other systems within  
43           ten (10) business days after receiving the completed application and associated fees.

**CONTINUATION PAGE 16: ORDINANCE NO. 2006-1**

**AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

- 1       1. Approval. If the county determines that the proposed design, installation, and  
2           management of the wastewater system, or the proposed modification of an existing  
3           wastewater system, conform to this ordinance, a wastewater permit shall be issued to the  
4           owner and installer.
- 5       2. Review comments. If, upon review of the application and the supporting information, the  
6           county requires more information before a decision can be rendered, the county shall  
7           provide a list of questions or corrections. The applicant shall respond to these questions  
8           or corrections. Upon receipt of the applicant's response to these questions or corrections,  
9           the county shall continue the review of the application.
- 10      3. Denial. If, upon review of the application and the supporting information, it is  
11           determined that the proposed design, installation, modification, or management of the  
12           wastewater system does not conform to this ordinance, the wastewater permit shall be  
13           denied. The county shall provide, in writing, to the applicant the reasons for denial and  
14           the procedures for appeal. An applicant denied a wastewater permit by the county may,  
15           within fifteen (15) business days from the date of decision, appeal the decision as  
16           provided in Section 42-515, Variances and Appeals.

17 D. EVIDENCE OF A WASTEWATER SYSTEM PERMIT: When a wastewater system  
18    permit is approved, a copy of the permit shall be provided to the permittee. It is the  
19    responsibility of the permittee to post, or have posted, the appropriate portion of the permit in  
20    such a location and manner, on the site where the wastewater system is to be installed or  
21    modified, that the information on the permit is visible from the street. The permit shall  
22    remain posted until completion of the wastewater system installation or modification and the  
23    final inspection has occurred. The installer shall keep a set of approved plans and  
24    specifications on site during all phases of wastewater system construction, until final  
25    inspection has occurred. The plans and specifications shall be made available to the county  
26    upon request. The address of the site shall be posted at the site and clearly visible from the  
27    street.

28  
29 **Sec. 42-503. Wastewater Systems - Over 2000 gals/day**

- 30 A. In addition to the requirements in Section 42-502, Wastewater System Permit, the following  
31    requirements shall be met for wastewater systems designed to receive over 2000 gals/day.
- 32 B. DISCHARGE PLAN: An approved discharge plan, or a letter indicating that a discharge  
33    plan is not required, shall be obtained from the Water Quality Control Commission or the  
34    New Mexico Environment Department, Ground Water Quality Bureau, prior to a wastewater  
35    system permit being issued.
- 36 C. ENGINEER: The wastewater system shall be designed and submitted to the county for  
37    review under the seal of a professional engineer licensed in the State of New Mexico.
- 38 D. OPERATOR: The operator shall have the appropriate wastewater operator's license as  
39    required by the State of New Mexico.
- 40 E. PERFORMANCE: If less than two (2) feet of suitable native soil is directly beneath the  
41    disposal field, disinfection is required.

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**Sec. 42-504. Cluster and Community Systems**

- 1  
2 A. In addition to the applicable requirements in Section 42-502 and 42-503, the following  
3 requirements shall be met.
- 4 B. DESIGN: The systems shall be designed and constructed in accordance with the  
5 requirements of this ordinance. For the purposes of using Chart 1 Maximum Total Flow, the  
6 lot size shall be the sum of the lot sizes of the lots using the wastewater system.
- 7 C. PERMITS REQUIRED: Each lot owner, for that portion of the wastewater system for which  
8 they are responsible for having installed or maintained, shall obtain a wastewater system  
9 permit and an operating permit. The owner of the property on which the treatment or disposal  
10 component is located shall obtain a wastewater system permit and a operating permit for the  
11 remaining portion of the system.
- 12 D. MAINTENANCE AND OWNERSHIP AGREEMENT: Each property owner on a cluster or  
13 community system shall prevent materials which would adversely affect the operation of the  
14 cluster or community system from entering the wastewater system. The applicant shall  
15 obtain all necessary rights-of-way, easements, or ownership of properties necessary for the  
16 operation of the cluster or community system. The owners issued the operating permit is  
17 responsible for the operation and maintenance of the cluster or community system, and  
18 remains responsible up until such time as the new owner obtains the operating permit for the  
19 system. The applicant shall submit to the county:
- 20 1. A certified copy of an affidavit, which has been duly recorded in the office of the County  
21 Clerk and added to the deed for the real property on which the system is located and the  
22 deed for the real property of each property served. The affidavit shall state that the  
23 property shall not be transferred to a new owner without the new owner being advised  
24 that the property is part of this system and that the new owner apply for and obtain an  
25 operating permit;
- 26 2. Copy of a maintenance agreement to be reviewed and approved by the county. An  
27 approved maintenance agreement shall be in effect at all times for the wastewater system.
- 28 E. NOTICE OF APPLICATION SUBMITTAL: Within 20 days of the county receiving a  
29 complete application for a community system, the county shall send written notice of the  
30 applications submittal to the owners of all property within 200 feet of the proposed location  
31 of the system. Written notice shall also be sent to lots which, as part of the subdivision  
32 approval, are required to utilize the community system.
- 33

**Sec. 42-505. Technical Advisory Committee**

34  
35 Technical product review and approval shall be in accordance with Section 9-7A-15 NMSA  
36 1978. All proprietary treatment systems proposed for secondary or tertiary treatment must be  
37 certified by the Technical Advisory Committee for that level of treatment.

38

**Sec. 42-506. Temporary Systems and Abandonment of Systems**

- 39  
40 A. HOLDING TANK PERMIT: A holding tank permit is a temporary permit that allows the  
41 installation of a holding tank. Holding tanks may be used on a temporary basis such as when  
42 it appears a sewer system may be available within six (6) months of the holding tank permit  
43 being issued. The contents of the holding tank shall be disposed of in an approved manner.  
44 A pumping agreement with a septage hauler shall be provided to the county prior to issuance

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1 of the permit. The owner shall retain all manifest tickets until the holding tank is properly  
 2 abandoned. A holding tank shall not be used as a permanent method of managing  
 3 wastewater.

4 B. OTHER TEMPORARY SYSTEMS: The county's approval shall be obtained prior to the use  
 5 of a portable toilet or other temporary toilet service. The contents of the holding  
 6 compartment shall be disposed of in an approved manner.

7 C. WASTEWATER SYSTEM ABANDONMENT: Whenever the use of a wastewater  
 8 treatment and disposal system is permanently discontinued for any reason, the septic,  
 9 holding, or dosing tank shall be abandoned within 30 days of the discontinuance of use.  
 10 However, if the county approves the use of a tank where the tank is to become an integral  
 11 part of a sewer system, the tank need not be abandoned. The county shall be notified prior to  
 12 abandonment and the site shall be subject to an inspection by the county. Abandonment  
 13 shall take place as described in the most current New Mexico Plumbing and Mechanical  
 14 Code.

15  
 16 **Sec. 42-507. Fees**

- 17 A. No permit or approval shall be issued until all required fees have been paid.  
 18 B. A schedule of fees shall be established by the County Commission.  
 19 C. Fees are nonrefundable.

20  
 21 **Sec. 42-508. Performance Standards**

- 22 A. The final effluent quality from the wastewater treatment component shall continually comply  
 23 with the requirements of this ordinance. The performance standards for effluent shall be met  
 24 at the end of the treatment component.  
 25 B. Total flow shall not exceed flow per lot size as shown on Charts 1, Maximum Total Flow.

26  
 27 **Table 1. Performance Standards for Effluent**

Primary	Secondary	Tertiary	Disinfection <sup>E</sup>
Settleable Solids ≤ 0.5ml/l	Settleable Solids ≤ 0.5ml/l	Settleable Solids ≤ 0.5ml/l	Fecal ≤ 200 MPN/100ml
BOD ≤ 150 mg/l	BOD <sup>A</sup> ≤ 30 mg/l	BOD <sup>A</sup> ≤ 30 mg/l	
TSS ≤ 60 mg/l	TSS <sup>B</sup> ≤ 30 mg/l	TSS <sup>B</sup> ≤ 30 mg/l	
Fecal ≤ 10 <sup>6</sup> MPN/100ml	Fecal ≤ 10 <sup>4</sup> MPN/100ml	Fecal ≤ 10 <sup>3</sup> MPN/100ml	
TN <sup>C</sup>	TN <sup>C</sup>	TN <sup>D</sup>	

28  
<sup>A</sup> Five-day BOD not to exceed a 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l.

<sup>B</sup> A (six) 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l.

<sup>C</sup> See Chart 1 for effluent performance standards for Total Nitrogen (TN)

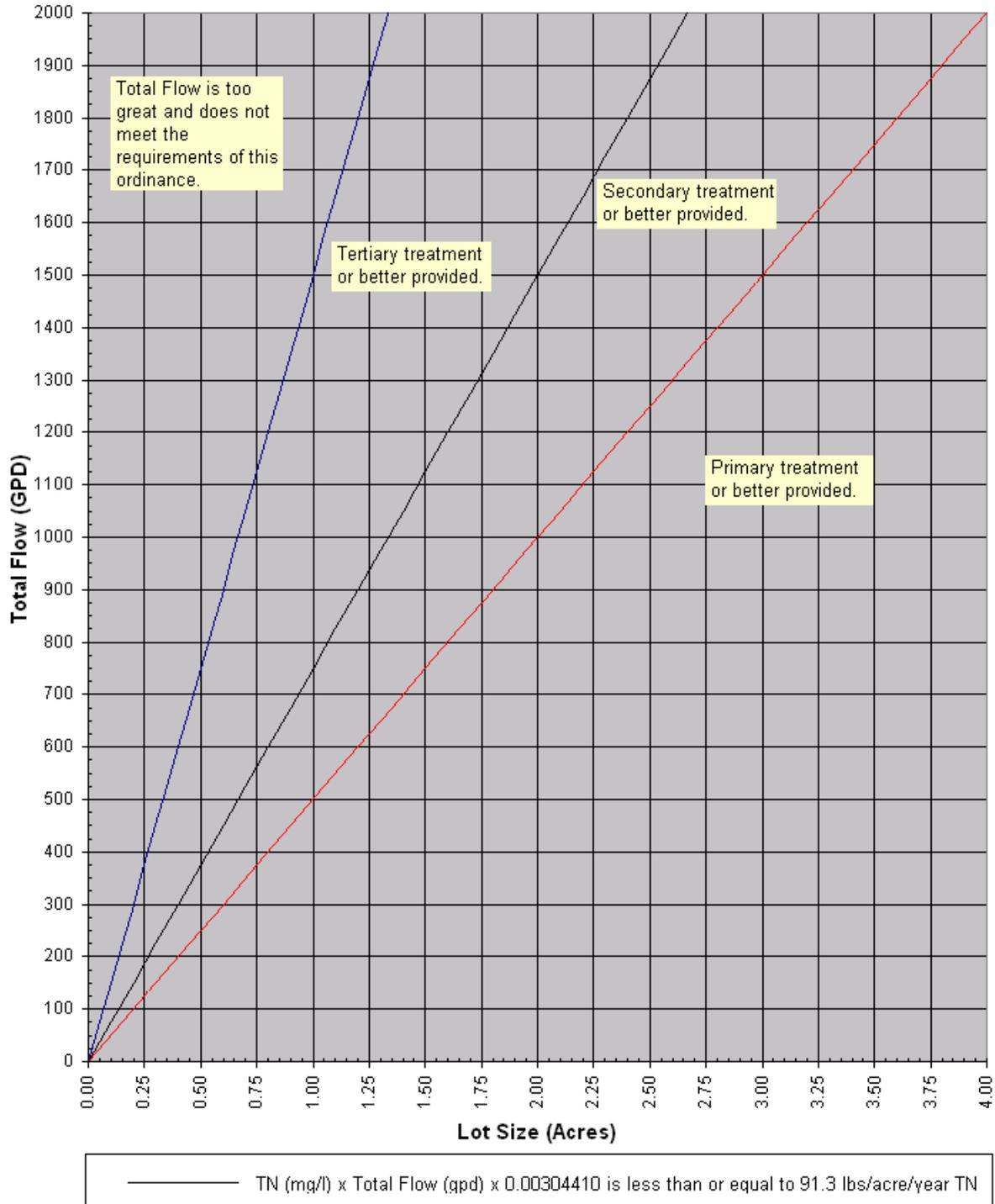
<sup>D</sup> Based on a 6-sample rolling average with no single sample exceeding twice the concentration limit from Chart 1.

<sup>E</sup> When disinfection is required, the effluent shall be subject to a minimum of secondary treatment prior to disinfection.

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1

**Chart 1. Maximum Total Flow**



2

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**Sec. 42- 509. Design**

**A. GENERAL DESIGN**

1. Pretreatment. Substances deleterious to a wastewater system shall be intercepted, diluted, or treated prior to the substance discharging into a wastewater system. Toxic, hazardous, or industrial wastewater shall not be introduced into a plumbing drain system that is served by a wastewater system.
2. Design basis. All wastewater systems shall be designed to hold wastewater and/or reduce the contaminant load and disperse the hydraulic flow of wastewater as specified in this ordinance. Additional water resulting from the use of a reverse osmosis water treatment unit shall not enter the wastewater system unless the wastewater system is designed to handle the additional hydraulic flow.
3. Venting. A means for providing a free flow of air movement shall be provided throughout all gravity flow portions of a wastewater system. All holding components shall be vented.
4. Frost protection. All wastewater system components shall be designed to be protected from freezing temperatures that could detrimentally affect component operation.
5. Soil erosion control. All wastewater system designs shall incorporate protection of the system from soil erosion that could detrimentally affect treatment or disposal.
6. Alarms or warning systems.
  - a. A wastewater system treatment component utilizing a mechanical or electrical device shall be provided with an automatic visual and audible means of notifying the operator of the wastewater system of a device failure in accordance with this section.
  - b. A wastewater system holding component shall be provided with an automatic visual and audible means of notifying the operator of the wastewater system of the necessity for pumping. An alarm indicating the necessity to pump a wastewater system holding component shall be set so as to allow at least six (6) hours holding capacity above the high water alarm.
    1. An alarm indicating the failure of a pump shall remain audible and visible until manually turned off.
7. Control Panels. Electrical components shall be UL listed, waterproof, and if placed outside or in an unheated area, specified by the manufacturer for outdoor use.
8. Water tight. Joints and openings of tanks shall be sealed using a bonding compound that will adhere to the construction materials of the tank and inlet and outlet devices.
9. Accessibility. The design of a wastewater system shall provide for access to all components that require maintenance or observation. An easily accessible sampling port located at the end of the treatment component where performance standards are to be met shall also be provided.
10. Observation Port. Each soil disposal component shall include an observation port of 4-inch minimum diameter located at the end of each trench. An observation port should be a 4" pvc pipe installed vertically from the bottom of the trench to 12" above final surface grade. The portion of pipe in aggregate (gravel) shall be perforated. The observation port

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1 can be connected to the drainline with a pvc tee or installed adjacent to the drainline, at  
2 the end of the trench. The observation port shall be capped.

3 11. Waste Interceptors.

- 4 a. When wastewaters are discharged containing excessive amounts of grease, garbage,  
5 flammable wastes, sand or other ingredients that may affect the operation of an onsite  
6 wastewater system, an interceptor for such wastes shall be installed in-line prior to the  
7 wastewater treatment unit.
- 8 b. Installation of such interceptors shall comply with the most current Uniform  
9 Plumbing Code.
- 10 c. Waste interceptors shall be maintained in accordance with manufacturer's  
11 specifications.

12 12. Anchoring system components. All wastewater system components subject to flotation  
13 in saturated conditions shall be installed so as to prevent flotation. Anchoring shall be  
14 done as specified by the manufacture.

15 B. DESIGN FLOW: For purposes of design, flow into a wastewater system shall be estimated  
16 using Table 2, "Estimated Wastewater Flows", and the following requirements.

- 17 1. For residences, the volume of wastewater shall be calculated as 40 percent blackwater  
18 and 60 percent graywater.
- 19 2. Estimated flows for dwelling units assume a maximum occupancy of two (2) persons per  
20 bedroom for the first two bedrooms and one (1) person for each bedroom thereafter.  
21 Seventy-five (75) gallons per person per day.
- 22 3. Estimated flows for residential care facilities assume a maximum occupancy of two  
23 persons per bedroom (seventy-five (75) gallons per person per day). Where residential  
24 care facilities will house more than two persons in any bedroom, estimated flows shall be  
25 increased by 50 gallons per each additional occupant.
- 26 4. Estimating occupant load. When the number of persons using a facility is needed to  
27 determine the wastewater design flow, that number shall be the actual number of persons,  
28 or the occupant load as calculated per the most current Uniform Building Code,  
29 whichever is greater.
- 30 5. Estimating contaminant loads. Estimates of contaminant loads shall be based on a  
31 detailed analysis performed by the designer of the system and shall include, but not be  
32 limited to: BOD, Total Nitrogen, and Total Suspended Solids.
- 33 6. Total flow. For the purposes of using Chart 1, total flow means the sum of the design  
34 flows for all wastewater systems on a lot.
- 35 7. Flow velocity.
- 36 a. Gravity flow piping between wastewater system components shall be installed at a  
37 pitch that produces a computed flow velocity of at least one-foot per second when  
38 flowing half full.
- 39 b. Pressurization equipment or devices and piping upstream of a wastewater system  
40 treatment or disposal component shall be installed to manufacturers  
41 recommendations.
- 42 c. Gravity piping within a wastewater disposal component shall be installed level.
- 43 8. Other accepted design flow references (such as the Uniform Plumbing Code or the U.S.  
44 Environmental Protection Agency (USEPA) design manual: on-site wastewater treatment

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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 or 1.5 for design flow calculations.

9. Water softener wastewater. Waste from a water softener unit shall comply with the following:
  - a. Softener waste may be discharged to a conventional treatment unit.
  - b. For new construction utilizing an advanced treatment unit, 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 county.

**Table 2. Estimated Wastewater Flows**

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 with 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	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

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add for bakery	40 per 100 sq ft floor space
add for meat department	75 per 100 sq ft floor space
add per public restroom	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

1  
2  
3  
4  
5  
6

**C. SEPTIC TANKS:**

1. The design and construction of septic tanks shall comply with the design and construction standards set forth in the wastewater ordinances adopted by the New Mexico Environmental Improvement Board or incorporated in those ordinances by reference. Minimum effective septic tank capacity shall be determined from Table 3, Septic Tank

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- 1 Capacity. All septic tanks shall be multiple chambered or shall be placed in series to  
 2 achieve the required effective capacity.
- 3 2. An approved outlet filter device shall be installed in the tank or before final discharge to  
 4 the drainfield out side of the tank. For tanks placed in series, the outlet device shall be  
 5 placed in the last tank. Outlet filters shall be placed to allow accessibility for routine  
 6 maintenance. Utilization and sizing of outlet filters shall be in accordance with the  
 7 manufacturer’s recommendations.
- 8 3. All tanks shall be watertight.
- 9 4. Access manholes shall be installed over each tank chamber and shall extend to finished  
 10 grade with secure lids.
- 11 5. If the wastewater flow to an existing system increases by no more than 75 gallons per day  
 12 above the design flow the system was initially approved for, the minimum effective  
 13 capacity of the septic tank need not be increased. However, performance standards from  
 14 Chart 1 “Maximum Total Flow” shall apply.

**Table 3. Septic Tank Capacity**

DESIGN WASTEWATER FLOW Gallons/Day	MINIMUM LIQUID CAPACITY Gallons
0-375	1000
376-450	1200
451-600	1500
601-1250	2000
1251-1750	2500
1751-2500	3000

- 18
- 19 a. Note: Minimum Liquid Capacity for flows in excess of 2500 gal/day shall be based on the following  
 20 equation: (Gallons per day (gal/day) x 0.75 ) + 1125
- 21
- 22 D. GREASE INTERCEPTORS: Grease interceptors are generally not required as part of a  
 23 wastewater system that serves a residence. Grease interceptors are required where grease  
 24 waste is produced in quantities that could cause line stoppage or hinder wastewater disposal.  
 25 The design, construction, and installation of grease interceptors shall be based on standards  
 26 found in the most current Uniform Plumbing Code.
- 27 E. DOSING TANKS (PUMP TANKS): The following requirements shall apply to all dosing  
 28 tanks used as part of a wastewater treatment and disposal system, unless specifically  
 29 exempted by other provisions of this ordinance.
- 30 1. Dosing tanks shall have a minimum effective capacity of one (1) day's design flow.
- 31 2. Design and construction standards for dosing tanks shall be the same as for septic tanks,  
 32 except that a single compartment tank is allowed and manhole covers shall be brought to  
 33 grade.
- 34 F. HOLDING TANKS: Holding tanks shall be constructed of the same materials and by the  
 35 same procedures required of septic tanks, except they shall have no discharge outlet and may  
 36 be one-chambered.

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- 1 1. The minimum size of a holding tank shall be 1000 gallons, or three (3) times the design  
2 flow, whichever is greater.
- 3 2. Holding tanks shall be located in an area readily accessible to a pump vehicle under all  
4 weather conditions, and where accidental spillage during pumpage will not create a  
5 nuisance or a hazard to public health.
- 6 3. Holding tanks shall be equipped with a visible and audible high-water alarm system  
7 placed in a conspicuous location approved by the county. The alarm shall be set to  
8 activate at 80 percent of tank capacity, or sooner.
- 9 4. The installation of holding tanks can only be authorized on a temporary basis for no more  
10 than one (1) year from the date of installation.

11  
12 **Sec. 42-510. Graywater Systems:**

- 13  
14 A. All information required for the issuance of a wastewater permit shall be required for a  
15 graywater system.
- 16 B. Design flows for graywater systems shall be calculated by the following:
  - 17 1. Twenty percent (20%) of the total design flow for the segregation of laundry waste; and
  - 18 2. Thirty-three percent (33%) of the total design flow for the segregation of the bathroom  
19 (showers, tubs and wash basin) waste.
- 20 C. Clearance requirements for graywater systems shall be four (4) feet of suitable soil.  
21 Discharge into the soil where the vertical clearance from the bottom of the absorption area to  
22 seasonal high ground water table, impervious formation, or other limiting layer is more than  
23 four (4) feet is not allowed. A reduction in this clearance may be allowed with appropriate  
24 advanced treatment or alternative disposal.
- 25 D. Setback requirements for graywater systems shall meet the requirements of Table 7 except  
26 for the following:
  - 27 1. property lines, two (2) feet for disposal area;
  - 28 2. building or structure, two (2) feet for disposal area; and
  - 29 3. building or structure, zero (0) feet for above ground tanks.
- 30 E. A treatment unit shall be required for all graywater systems. If a tank is utilized as the  
31 treatment unit:
  - 32 1. the tank may be a single compartment;
  - 33 2. the tank shall be sized to accommodate one day design flow; and
  - 34 3. access to the tank shall be provided by a secure lid installed at grade.
- 35 F. Above ground tanks shall be constructed of solid durable materials, not subject to corrosion  
36 or decay and shall be approved by NMED. Above ground tanks shall be set on a three inch  
37 (3") minimum concrete pad. Metal tanks shall not be authorized.
- 38 G. All tanks shall have an overflow drain with a permanent connection to the building drain or  
39 building sewer. The tank shall be protected against sewer line backflow by a backwater  
40 valve.
- 41 H. Each tank shall be vented as required by the Uniform Plumbing Code.
- 42 I. Each tank shall have its rated liquid capacity permanently marked on the unit. In addition, a  
43 sign "GRAYWATER SYSTEM, DANGER - UNSAFE WATER" shall be permanently  
44 marked on the tank.

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- 1 J. The graywater system shall have no direct or indirect cross connections with potable water  
2 systems.
- 3 K. Graywater use for purposes other than irrigation or toilet flushing is prohibited. Irrigation of  
4 edible food crops is prohibited.
- 5 L. Graywater discharges of less than 250 gallons per day of private residential graywater  
6 originating from a residence for the resident's household flower gardening, composting or  
7 landscaping irrigation shall be allowed if:
- 8 1. A constructed graywater distribution system provides for overflow into the sewer system  
9 or on-site wastewater treatment and disposal system;
  - 10 2. A graywater storage tank is covered to restrict access and to eliminate habitat for  
11 mosquitoes or other vectors;
  - 12 3. A graywater system is sited outside of a floodway;
  - 13 4. Graywater is vertically separated at least five feet above the ground water table;
  - 14 5. Graywater pressure piping is clearly identified as a nonpotable water conduit;
  - 15 6. Graywater is used on the site where it is generated and does not run off the property lines;
  - 16 7. Graywater is discharged in a manner that minimizes the potential for contact with people  
17 or domestic pets;
  - 18 8. Ponding is prohibited, discharge of graywater is managed to minimize standing water on  
19 the surface and to ensure that the hydraulic capacity of the soil is not exceeded;
  - 20 9. Graywater is not sprayed;
  - 21 10. Graywater is not discharged to a watercourse;
  - 22 11. Graywater is not stored longer than 24 hours before being discharged;
  - 23 12. Graywater use for purposes other than irrigation or composting is prohibited, unless a  
24 permit for such use is issued by the county;
  - 25 13. Graywater is not used to irrigate food plants except for fruit and nut trees;
  - 26 14. Graywater is discharged to a mulched surface area or to an underground irrigation  
27 system;
  - 28 15. Graywater is not discharged closer than 100 feet to a watercourse or private domestic  
29 well, or closer than 200 feet to a public water supply well;
  - 30 16. Graywater does not create a public nuisance;
  - 31 17. For residential units using an on-site wastewater system for blackwater treatment and  
32 disposal, the use of a graywater system does not change the design, capacity or absorption  
33 area requirements for the on-site wastewater system at the residential unit, and the on-site  
34 wastewater system is designed and sized to handle the combined blackwater and  
35 graywater flow if the graywater system fails or is not fully used; and
  - 36 18. Graywater does not contain hazardous chemicals derived from activities such as cleaning  
37 car parts, washing greasy or oily rags or disposing of waste solutions from home photo  
38 labs or similar hobbyist or home occupational activities.

39  
40 **Sec. 42-511. Disposal Systems**

- 41 A. All systems shall be located and installed so that with proper maintenance the systems  
42 function in a sanitary manner, do not create sanitary nuisances or health hazards, and do not  
43 endanger the safety of any domestic water supply, ground water, or surface waters.  
44 Wastewater from treatment and disposal systems shall not be discharged onto the ground

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1 surface, or directly or indirectly discharged into arroyos, ditches, drainage structures, ground  
2 water, or surface waters unless with an approved Discharge Plan from the State of New  
3 Mexico Environment Department, Ground Water Quality Bureau. To prevent such discharge  
4 or health hazards:

- 5 1. Systems shall not be located under buildings, including pilings for elevated structures, or  
6 within fifteen (15) feet of swimming pool walls, or within five (5) feet of property lines.
- 7 2. Systems shall not be located on slopes that exceed fifteen (15) degrees as measured from  
8 the horizontal; and
- 9 3. Suitable, unobstructed land shall be available for the disposal system and its replacement  
10 or expansion.
- 11 4. No conventional on-site wastewater system shall discharge wastewater into the soil where  
12 the vertical clearance from the bottom of the absorption area to seasonal high ground  
13 water table, impervious formation or other limiting layer is less than four feet of suitable  
14 soil. A reduction in this clearance may be allowed with appropriate advanced treatment  
15 or alternative disposal.

16 B. Except as provided in other sections of this ordinance, the disposal capability of a wastewater  
17 system disposal component utilizing native soil shall be based on Table 4, Maximum Soil  
18 Infiltration Rates. The soil conditions at the infiltrative surface of the wastewater system  
19 disposal component utilizing native soils shall be used to establish the maximum loading rate  
20 for a wastewater system disposal design. Designs shall take into account restrictive horizons  
21 or ground water levels that may affect treatment or disposal. Documentation based on soil  
22 permeability and evapotranspiration estimates correlated to specific soil characteristics and  
23 described in a detailed soil characteristic analysis shall be submitted.

- 24 1. The following treatment levels are required for the depth of suitable soil:
  - 25 a. Greater than or equal to 4 feet of suitable soil – primary treatment;
  - 26 b. From 2 to 4 feet of suitable soil – secondary treatment and disinfection; and
  - 27 c. Less than or equal to 2 feet of suitable soil – tertiary treatment and disinfection.
  - 28 d. A mound system may be used to meet clearance requirements or to overcome soil  
29 type limitations in lieu of advanced treatment.

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**Table 4. Maximum Soil Infiltration Rates**

Soil Type	Soil Texture	Application Rate (AR) (sq. ft./gal/day)
Ia <sup>1</sup>	Coarse Sand	1.25
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 <sup>2</sup>	Sandy Clay, Silty Clay, Clay	5.00

<sup>1</sup>Secondary treatment and disinfection required.

<sup>2</sup>Secondary treatment with low pressure dosed disposal system required.

- C. Distribution box (or Devices). Distribution boxes (D-boxes) which are used for distributing wastewater to the disposal lines shall be installed as described below:
1. Distribution boxes shall be watertight, constructed of durable materials, have adequate structural strength, and be of sufficient size to accommodate the required number of drainlines.
  2. D-box is required when more than two trenches will be used. Each drainline shall be connected to the distribution box.
  3. The invert of inlets to the box shall be at least one (1) inch above the invert of the outlets. The invert of all outlets shall be level with respect to each other.
  4. Set on a concrete foundation or compacted soil.
  5. The distribution box shall be easily accessible, brought up to grade or its location permanently marked.
  6. A method of adjusting the flow through the distribution box shall be available.
  7. Concrete D-boxes shall be coated on the inside with bituminous coating or other approved method acceptable to the county.
- D. Header pipe. Header pipe, when used, shall be installed in compliance with the following requirements:
1. Header pipe shall have a minimum inside diameter of four (4) inches for gravity flow applications. Header pipe shall not be perforated.
  2. The header pipe shall be laid level with direct, watertight connections to each disposal line and the septic tank outlet pipe. When a disposal system is utilized which does not require the use of mineral aggregate or the header pipe is not included within the absorption surface area, the header pipe shall not be included in disposal area size calculations. The header pipe shall be designed to distribute effluent as equally as

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1 practical to each drainline and shall be supported so that the header is level. When  
2 installed in a disposal bed which uses mineral aggregate, the header pipe shall be encased  
3 in mineral aggregate, and shall be included as part of the disposal area.

4 3. Pipe that connects the septic tank outlet to the header pipe or a distribution box shall  
5 comply with the strength and material standards for header pipe as required by the  
6 county.

7 4. Leveling of pipes, distribution, or any other portions of a wastewater system shall be  
8 accomplished with the use of the proper leveling equipment.

9 E. Dosing. Pumps used to distribute wastewater effluent shall be certified by the manufacturer  
10 to be suitable for dosing. Dosing siphons may be used in lieu of pumps.

11 1. Dosing systems with 2,000 square feet of disposal area or less shall consist of a dosing  
12 tank that receives the flow from a septic tank or other treatment unit. This dosing tank  
13 shall be provided with one or more pumps with level controls set in accordance with the  
14 requirements set forth in 3 and 4 of this subsection. Two pumps shall be required for  
15 systems treating more than 500 gallons per day of commercial wastewater and the system  
16 shall be provided with a redundant pumping system. Where dosing is required for  
17 systems treating 500 gallons or less per day of commercial wastewater, only one pump  
18 shall be required.

19 2. Dosing systems with design flows greater than 500 gallons per day or with disposal areas  
20 greater than 2000 square feet shall have a maintenance agreement in place for the dosing  
21 system.

22 3. Dosing systems that have more than 2,000 square feet of disposal area shall have two  
23 dosing pumps, with each pump serving one-half of the total required absorption area.  
24 The pumps shall dose alternately. Dosing pumps shall be provided with effluent level  
25 controls set in accordance with the requirements set forth in 3 and 4 of this subsection.

26 4. The volume of the dose shall be adequate to assure that the entire drainline is dosed  
27 during each cycle.

28 5. The rate of dosing shall not exceed the ability of the soil to accept the effluent.

29 6. Where a septic tank or other wastewater receptacle must be placed too low to permit  
30 gravity flow into a properly designed, constructed, and located disposal system, a pump  
31 may be used to lift the effluent to a properly constructed header pipe or distribution box  
32 for effluent distribution by gravity throughout the drainfield area.

33 7. An audio and visual high-water alarm shall be in a location visible and audible to system  
34 users. If the alarm is located outside, the alarm shall be waterproof and specified by the  
35 manufacturer for outside use.

36 8. Effluent distribution to native soils shall be such that no dose exceeds 20% of the total  
37 daily wastewater flow estimate.

38 F. Disposal Systems.

39 1. Except as otherwise indicated in this ordinance, disposal systems shall be constructed as  
40 specified below.

41 a. The minimum required absorption surface area in a disposal systems in square feet  
42 shall be based on the wastewater design flow rate and shall be determined by utilizing  
43 Table 4, which is based on the soil classification found in the proposed location of the  
44 drainfield.

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- 1       b. The soil classification shall be determined by two test holes located at opposite ends  
2       of the proposed disposal system area.
- 3       c. A detailed soil profile, in accordance with U.S. Department of Agriculture (USDA)  
4       soil classification methodology, shall be submitted with the wastewater application  
5       for each hole, indicating soil horizons, horizon thickness as a function of depth, and  
6       soil texture.
- 7       d. For soil evaluation the American Society for Testing and Materials (ASTM) standard  
8       D5879-95 “Standard Practice for Surface Site Characterization for On-Site Septic  
9       Systems” and/or ASTE standard D5921-96 “Standard Practice for Subsurface Site  
10      Characterization of Test Pits for On-Site Septic Systems“ may be required by the  
11      county.
- 12      e. The county may waive the test pit requirement in the North Albuquerque Acres areas,  
13      West Mesa areas, and other areas as deemed appropriate by the county.
- 14      f. The required absorption surface area shall be sized on the most restrictive soil horizon  
15      located below and within 4 feet of the bottom of the absorption area.
- 16      g. Conventional treatment systems shall not be constructed in type Ia soils where the  
17      depth to groundwater is less than 30 feet, type IV soils, or gravel. For these soils refer  
18      to Table 4.
- 19      h. Effluent distribution to type IV soils shall be accomplished by means of timed low  
20      pressure dosed distribution.
- 21      i. The required absorption surface area shall be calculated by the following formula:  
22      ABSORPTION AREA = Q x AR, Q = the design flow rate in gallons per day; AR =  
23      application rate (from Table 4)
- 24      j. The gravel content of in-place natural soil shall not exceed 30%
- 25      k. Trenches shall conform to the following.
  - 26          1. The trench width shall be no less than one foot and no more than three feet.
  - 27          2. A minimum of six inches of aggregate shall be placed below the invert of the  
28          drainline to provide surge storage. This area of trench sidewall shall not be used  
29          in calculating the absorption area.
  - 30          3. Up to an additional three feet of aggregate may be placed below the distribution  
31          pipe.
  - 32          4. The total absorption area shall be calculated utilizing the total trench bottom and  
33          sidewall area, excluding the six inches of trench sidewall as described in  
34          Paragraph (2) of this subsection.
  - 35          5. The total absorption area shall not exceed seven square feet per linear foot of  
36          trench.
  - 37          6. A minimum of one hundred and fifty (150) square feet of bottom area shall be  
38          provided for each system exclusive of any hard pan, caliche, rock, clay or other  
39          impervious formations.
- 40      l. Disposal beds may be used in lieu of the trench method. A disposal bed consists of  
41      an area in which the entire earth content of the required absorption area is removed  
42      and replaced with aggregate products and drainlines or other approved alternative  
43      disposal components. The absorption surface area of the bed shall be at least fifty  
44      (50) percent greater than the minimum required absorption surface area for trenches

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1 with a minimum of two hundred and twenty five (225) square feet of bottom area. In  
 2 addition, disposal beds shall conform to the following.

- 3 1. A minimum of twelve inches of aggregate shall be placed below the invert of the  
 4 drainlines.
- 5 2. Up to an additional one foot of aggregate may be placed below the distribution  
 6 pipes.
- 7 3. The total absorption area shall be calculated utilizing the total bed bottom and  
 8 sidewall area.
- 9 4. The drainlines shall be placed a maximum of six feet on center in an absorption  
 10 bed. Where two or more beds are used to obtain the necessary absorption area,  
 11 there shall be a minimum 10-foot separation between the side-walls of adjacent  
 12 absorption beds.

13 m. For secondary and tertiary treated effluent, the minimum calculated absorption area  
 14 required for conventional treatment may be reduced 30% and the maximum trench  
 15 depth may be no greater than 10 feet. In no case shall the maximum reduction for the  
 16 disposal absorption surface area exceed 30%.

17 **Table 5. Trench Construction Requirements**

	MINIMUM	MAXIMUM
Number of drainlines	1	
Length of each drainline	--	100 ft.
Bottom width of trench	12 in.	36 in.
Depth of earth cover of drainline	9 in.	--
Depth of Trench	--	6 ft.
Grade of lines	Level	3 inch/100 ft
Aggregate under drainlines	12 in.	
Aggregate over drainlines with:		
geotextile fabric	0 in. thick	--
other material	2 in. thick	--

19  
 20 G. When installing a disposal system that uses mineral aggregate, all portions of the header pipe  
 21 and perforated drainlines shall be installed in clean washed aggregate meeting the  
 22 requirements in Table 6, Clean Aggregate.

23 **Table 6. Clean Aggregate**

Sieve Size	2 IN.	1 1/2 IN.	1 IN.	3/4 IN.	1/2 IN.	3/8 IN.	NO. 4
Percent Passing	90-100	35-100	15-100	0-70	0-50	0-30	0-5

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- 1
- 2 1. Approved materials for disposal mineral aggregate are quartz rock, granite, river gravel,
- 3 and other equally durable materials.
- 4 2. A copy of the receipt for the aggregate shall be part of the documentation of aggregate
- 5 size and quality, and records shall be available before or at the time of final inspection.
- 6 3. The aggregate disposal system shall be protected from infiltration of earth backfill by an
- 7 approved filter. The filter shall be placed on top of the aggregate only. The minimum
- 8 earth cover over the top of the disposal system, distribution box, or header pipe in
- 9 standard subsurface systems shall be nine (9) inches after natural settling.
- 10 4. For gravity aggregate disposal systems, inside pipe diameter shall not be less than four
- 11 (4) inches. Perforated pipe shall have two rows of holes and a minimum perforated area
- 12 of 1-1/2 square inches per linear foot. Perforations shall be located not less than 30°, or
- 13 more than 60°, from the vertical on either side of the centerline of the bottom of the pipe.
- 14 However, for disposal systems designed by a professional engineer, drainline perforation
- 15 area and hole configuration may differ but shall assure that effluent is distributed as
- 16 equally as possible throughout the disposal system.
- 17 5. Depending on the type of disposal system being utilized, the disposal absorption surface
- 18 shall be constructed level. Drainlines shall be placed at the same slope as the disposal
- 19 absorption surface.
- 20 6. The maximum length of drainlines for gravity systems shall not exceed 100 feet, and
- 21 where two or more drainlines are used they shall be, as near as practical, the same length.
- 22 The ends of two or more drainlines in bed and mound systems shall be connected to
- 23 produce a continuous circuit. A continuous circuit arrangement is also recommended but
- 24 not required for standard trench systems. The aggregate-soil interface shall be 12 inches
- 25 to 24 inches from the end of a drainline. When more than five-hundred (500) lineal feet
- 26 of leach line is required, a low-pressure dosed system shall be used.
- 27 7. At least (12) inches of soil cover shall be provided for drip disposal systems.
- 28 8. Alternative disposal systems include, but are not limited to, cluster systems,
- 29 evapotranspiration systems, mounds, subsurface irrigation, holding tanks, graywater
- 30 systems, and others as approved by the county.
- 31 9. Minimum spacing between trenches or leaching beds shall be four (4) feet plus (2) feet
- 32 for each additional foot of depth in excess of one (1) foot below the bottom of the
- 33 drainline. Distribution drainlines in leaching beds shall not be more than six (6) feet
- 34 apart on centers and no part of the perimeter of the leaching bed shall be more than three
- 35 (3) feet from a distribution drainline.

36 **H. Seepage Pits**

- 37 1. Installation of seepage pits shall be by variance only.
- 38 2. The minimum effective absorption area in any seepage pit shall be calculated as the
- 39 excavated side wall area below the inlet pipe exclusive of any hardpan, caliche, rock, clay
- 40 or other impervious formations. Bottom area is not included in absorption area.
- 41 3. Multiple seepage pit installations shall be served through an approved distribution box or
- 42 be connected in series by means of a watertight connection laid on undisturbed or
- 43 compacted soil. The outlet from each seepage pit shall have an approved vented leg
- 44 fitting extending at least twelve (12) inches below the inlet fitting.

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- 1       4. Each seepage pit shall have an excavated horizontal dimension of not less than four (4)  
2       feet. Each such pit shall be lined with approved type whole, new, hard-burned clay brick,  
3       concrete brick, concrete circular type cesspool blocks or other approved materials.
- 4       5. The lining in each seepage pit shall be circular and laid on a firm foundation. Lining  
5       materials shall be placed tight together and laid with joints staggered. Except in the case  
6       of approved type pre-cast concrete circular sections, no brick or block shall be greater in  
7       height than its width and shall be laid flat to form at least a four (4) inch wall. Brick or  
8       block greater than twelve (12) inches in length shall have chamfered matching ends and  
9       be scored to provide for seepage. Excavation voids behind the brick, block or concrete  
10      liner shall have a minimum of six (6) inches of clean three fourths (3/4) inch gravel or  
11      rock.
- 12     6. All brick or block used in seepage pit construction shall have a minimum compressive  
13      strength of twenty-five hundred (2500) pounds per square inch.
- 14     7. Each seepage pit shall have a minimum sidewall (not including the arch) of ten (10) feet  
15      below the inlet pipe.
- 16     8. The arch, cover or dome of any seepage pit shall be constructed in one of the following  
17      three ways.
  - 18      a. Approved type hard-burned clay brick, solid concrete brick or block laid in cement  
19      mortar.
  - 20      b. Approved brick or block laid dry. In both of the above methods, an approved cement  
21      mortar covering of at least two (2) inches in thickness shall be applied, said covering  
22      to extend at least six (6) inches beyond the sidewalls of the pit.
  - 23      c. Approved type one or two piece reinforced concrete slab of three thousand (3000)  
24      pounds per square inch minimum compressive strength, not less than five (5) inches  
25      thick and designed to support an earth load of not less than four hundred (400)  
26      pounds per square foot.
- 27     9. Each such arch, dome or cover shall be provided with a nine (9) inch minimum inspection  
28      hole with plug or cover and shall be coated on the underside with an approved bituminous  
29      or other nonpermeable protective compound.
- 30     I. The top of the arch, dome or cover must be a minimum of twelve (12) inches but not more  
31      than four (4) feet below the surface of the ground. Risers must be provided to extend the arch,  
32      dome or cover to within twelve (12) inches of the surface.
- 33     J. An approved vented inlet fitting shall be provided in every seepage pit so arranged as to  
34      prevent the inflow from damaging the sidewall. When using a one or two piece concrete slab  
35      cover inlet, the inlet fitting may be an approved one fourth (1/4) bend fitting discharging  
36      through an opening in the top of the slab cover.
- 37
- 38     K. The quality of treated wastewater entering an evaporation pond shall be, for total coliform,  
39      less than one (1) colony forming unit per 100mL by the membrane filter method, or not  
40      present in any 10mL portion by the MPN method.
  - 41      a. Evaporation ponds shall be designed and installed in such a manner as to prevent  
42      storm water runoff from entering the component.

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- 1       b.    An evaporation pond shall be provided with a perimeter dike of such height that the  
2            effluent volume discharged to the pond combined with the precipitation from a 100-  
3            year frequency, 24-hour duration rainfall event, does not reduce the available  
4            freeboard to less than one foot below the top of the perimeter dike. These ponds shall  
5            be enclosed with a fence as required for swimming pools in the most current New  
6            Mexico Building Code.
- 7       c.    The maximum surface area for any single pond is 1,000 square feet. If more than one  
8            pond is proposed, the ponds shall be placed in a parallel configuration with the flow  
9            evenly distributed between the ponds.
- 10      d.    Evaporation ponds shall be watertight.
- 11      e.    An evaporation pond shall be designed by a New Mexico licensed professional  
12            engineer.
- 13   L.    Evapotranspiration disposal system shall be designed and installed in such a manner as to  
14            prevent storm water runoff from entering the component.
  - 15          a.    The maximum surface area for any single cell is 1,000 square feet. If more than one  
16                cell is proposed, the cells shall be placed in a parallel configuration with the flow  
17                evenly distributed between the cells.
  - 18          b.    Evapotranspiration disposal systems shall be watertight.
  - 19          c.    An evapotranspiration disposal system shall be designed by a New Mexico licensed  
20                professional engineer.
  - 21          d.    Weather data that best represents the local area shall be used.
- 22   M.    Irrigation/Reuse Systems.
  - 23          1.    Effluent may be used for irrigation provided that, at a minimum, it shall meet secondary  
24                treatment standards prior to use.
  - 25          2.    The effluent may only be utilized subsurface.
  - 26          3.    Application of the effluent resulting in standing or ponding of the effluent, whether liquid  
27                or frozen, shall be prohibited. The application of effluent shall not result in the effluent  
28                leaving the application area.
  - 29          4.    Irrigation systems shall have no cross connections, direct or indirect, with potable water  
30                systems.
  - 31          5.    All irrigation systems shall be pressure dosed to assure an even distribution and loading  
32                of effluent throughout the application area.
  - 33          6.    All parts of the reuse system shall be protected from freezing.
  - 34          7.    Effluent shall be contained on the permitted property.
  - 35          8.    Secondary treated and disinfected effluent may be used for toilet flushing or fire  
36                suppression with county approval.
- 37   N.    Mound Systems.
  - 38          1.    Mound are generally constructed entirely above the surrounding ground surface,  
39                however, the mound may be partially buried.
  - 40          2.    The design of the mound system shall be in accordance with the most current approved  
41                design standards of mound system.
  - 42          3.    Pressure distribution to the mound shall be required.

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- 1 4. For type III and IV soils, mounds shall not be installed on slopes greater than six percent
- 2 (6%) without a variance. For type Ia through II soils, mounds shall not be installed on
- 3 slopes greater than twelve percent (12%) without a variance.
- 4 5. The finished side slope of the mound shall be at a minimum 1:3 and at a maximum 1:4
- 5 vertical to horizontal slope.

6 **O. Low Pressure Dosed Disposal Systems.**

- 7 1. Low pressure dosed (LPD) disposal systems may be used to achieve uniform distribution
- 8 of wastewater over the entire infiltrative surface. Effluent from this type of system is
- 9 pumped under low pressure through solid pipe into perforated drainlines installed within
- 10 a disposal system.
- 11 2. Low pressure dosed disposal systems may be used with any on site wastewater system
- 12 including conventional treatment systems, gray water systems and advanced treatment
- 13 systems.
- 14 3. Low pressure dosed disposal systems may be used with any disposal system including
- 15 trenches, beds, mounds, gravelless systems, evapotranspiration systems and drip
- 16 irrigation.
- 17 4. Lift stations are not classified as low pressure dosed disposal systems.
- 18 5. Low pressure dosed disposal systems may use a timer to equalize the flow over a 24-hour
- 19 period. LPD disposal systems may also be designed to rotate between separate disposal
- 20 areas by using rotator valves.
- 21 6. Low pressure dosed disposal systems may use dosing siphons or pumps.
- 22 7. All pumps shall be rated by the manufacturer for pumping sewage or effluent.
- 23 8. A single pump may be used for design flows equal to or less than 1,000 gpd. Dual pumps
- 24 are required for design flows over 1,000 gpd.
- 25 9. Design of the LPD system shall include:
  - 26 a. Design flow;
  - 27 b. Soil absorption area sized according to the soil infiltration rates found in Table 6.
  - 28 c. Spacing between drainlines with a minimum of 2 feet of separation;
  - 29 d. Length of pipe;
  - 30 e. Diameter of perforated drainlines used;
  - 31 f. Size and spacing of holes or emitters; and
  - 32 g. Pump performance sizing with allowances for head and friction losses at rated flows
  - 33 in gallons per minute.
- 34 10. Approved proprietary drip irrigation systems shall be designed and installed according to
- 35 manufacturer's specifications.
- 36 11. Drainlines shall be placed parallel to the natural contours of the site.
- 37 12. The distribution holes in the drainlines shall be shielded or protected in some manner to
- 38 prevent the infiltration of soil into the pipe.
- 39

40 **Sec. 42-512. Setback Requirements**

41 Wastewater system treatment, holding, and disposal components shall be located so as to meet

42 the minimum setback distances outlined in this section and Table 6, Minimum Setback

43 Distances.

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 THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10,  
 REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH  
 AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR  
 THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS;  
 PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES**

**Table 7. Minimum Setback Distances**

<b>From: To:</b>	<b>Building Sewer</b>	<b>Treatment Unit <sup>a</sup></b>	<b>Disposal Field</b>	<b>Seepage Pit</b>
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 <sup>d</sup>	10 ft.
Seepage pit	--	5 ft.	5 ft.	12 ft.
<b>Drinking water line <sup>e</sup></b>				
- private	1 ft.	10 ft.	10 ft.	10 ft.
- public	10 ft.	10 ft.	10 ft.	10 ft.
<b>Drinking Water Source/Well:</b>				
- 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. <sup>b</sup>	10 ft. <sup>b</sup>	10 ft. <sup>b</sup>
Unlined canals, drainage ditches	--	15 ft. <sup>b</sup>	25 ft. <sup>b</sup>	25 ft. <sup>b</sup>
Arroyos	--	15 ft. <sup>b</sup>	25 ft. <sup>b</sup>	25 ft. <sup>b</sup>
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 <sup>c</sup>	--	--	4 ft. to bottom of system	4 ft. to bottom of system
Swimming Pools	5 ft.	10 ft.	15 ft.	15 ft.

<sup>a</sup> Applies to enclosed systems and other wastewater treatment units.

<sup>b</sup> Plus depth of channel.

<sup>c</sup> Unlined privy pits shall provide clearance of at least 4 feet.

<sup>d</sup> Plus 2 feet for each additional foot of depth in excess of 1 foot below perforated pipe.

<sup>e</sup> Or applicable plumbing code.

**Sec. 42-513. Installation Requirements**

- A. A wastewater system treatment or disposal component shall be level.
- B. Wastewater system components utilizing soils shall not be installed if the soil is frozen at the infiltrative surface of the component.
- C. Snow cover shall be removed before excavating or installing wastewater system components utilizing soils.
- D. If wastewater systems are installed in fill material, the fill shall be required to settle for a period of at least six (6) months, or have been compacted to a density suitable for wastewater disposal. The fill material shall be of a soil material suitable for wastewater disposal. The appropriate documentation, which indicates the fill material is suitable, shall be provided to the county.

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1 E. All components of a wastewater system shall be installed in accordance with the permit  
2 approval.  
3

4 **Sec. 42-514. Inspections**

5 A. To ascertain whether the wastewater system conforms to this ordinance, to any permit or  
6 plans approved by the county, or to the conditions of approval, the county may inspect the  
7 installation, modification, operation, or maintenance of a wastewater system, and collect  
8 samples for analysis. The county may also issue orders requiring the correction of errors or  
9 deficiencies, or otherwise enforce this ordinance as provided by law.

10 B. When a permit is required, no part of a wastewater system shall be covered, nor any  
11 wastewater system component put into service until the county has inspected the system in  
12 accordance with this section and the permit. The permittee shall notify the county when the  
13 installation or modification of the wastewater system will be or is ready for an inspection.  
14 The county may require at least a 24-hour notification for each inspection. Saturdays,  
15 Sundays, and county-recognized holidays shall not be included in the calculation of this 24  
16 hour period. The notification shall be in person, in writing, by telephone or other electronic  
17 communication as directed by the county.

- 18 1. Prior to the final inspection by the county, the installer shall certify that the installation of  
19 the system complies with the approved design and installation requirements, and provide  
20 the county with one set of scaled as-built drawings. Wastewater systems that were  
21 required to be designed by a professional engineer shall be certified by the professional  
22 engineer.
- 23 2. Final inspection approval shall not be granted until the county has confirmed that all  
24 requirements of this ordinance are in compliance with plans and specifications submitted  
25 with the permit application.
- 26 3. If the system installation or modification does not pass an inspection, the county shall  
27 notify the installer and provide the installer with a corrective action list. The installer  
28 shall make all required corrections and notify the county of the completion of the affected  
29 work, and request re-inspection of the system. The county may require at least a 24-hour  
30 notification prior to reinspection. A re-inspection fee may be charged to the permittee for  
31 each additional inspection associated with the corrective action list. The county may  
32 issue an order directing an immediate cessation of the installation of a wastewater system  
33 or the modification to an existing wastewater system as appropriate.
- 34 4. The county may require a flow test be performed through the system to the point of  
35 effluent disposal. All lines, except disposal lines and components shall be watertight.  
36 Capacities, required air space, and fittings shall meet the requirements of the State of  
37 New Mexico.
- 38 5. The county may require operational testing of advanced treatment components to verify  
39 initial functioning.
- 40 6. A building or structure shall not be occupied until final inspection approval has been  
41 obtained.
- 42 7. The county may require additional departmental inspections in addition to those specified  
43 under this ordinance.

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1 8. To assure compliance with the conditions of the permits, the county may, periodically,  
2 inspect those wastewater systems that receive commercial wastewater.

3 C. TESTING OF SYSTEMS PRIOR TO OPERATION: Before being put into service, the  
4 components of a wastewater system shall be hydraulically tested by the installer in  
5 accordance with the manufacturer's specifications or as otherwise specified in the permit.  
6 Operation shall commence only if the results of the tests confirm that the wastewater system  
7 meets the applicable manufacturer's specifications, permit conditions, and any other  
8 requirements as outlined in this ordinance.

9 D. LOCATING OF WASTEWATER SYSTEMS: The County may record the location of the  
10 wastewater system electronically, such as by using global positioning system equipment,  
11 during inspection. The County may maintain a record of these locations in an electronic  
12 format.  
13

14 **Sec. 42-515. Maintenance Requirements**

15 A. The owner of a secondary or tertiary wastewater treatment system shall have a written  
16 contract with a certified maintenance provider to inspect and maintain the advanced treatment  
17 system for the life of the system. The wastewater system shall be maintained in accordance  
18 with the approved management plan and permits, with periodic inspections of the wastewater  
19 system. The owner of the system is responsible for maintenance of the wastewater system.

20 B. The pumping of wastewater system holding and treatment components, including septic  
21 tanks and holding tanks, is required as specified in the management plan.

22 C. At the completion of an inspection or pumping event, the maintenance person shall, within  
23 ten (10) days of the date of inspection or pumping event, submit documentation of the event  
24 to the owner of the system. The county may require from the owner verification of any  
25 information contained in the event documentation from the owner. Records shall be kept by  
26 the maintenance person and made available to the county upon request. Documentation shall  
27 include the following information:

- 28 1. The wastewater system permit number; and
- 29 2. The address of the property where the system is located; and
- 30 3. The date of inspection or pumping; and
- 31 4. The name, address, and phone number of the person performing the inspection,  
32 maintenance, or pumping; and
- 33 5. Checklist used to perform the inspection; and
- 34 6. Results of the inspection and type of maintenance performed; and
- 35 7. Any other information required by the approved management plan.  
36

37 **Sec. 42-516. Monitoring**

38 A. Wastewater systems that require advanced treatment shall be monitored as specified in this  
39 ordinance.

40 B. The owner of a wastewater system shall permit maintenance personnel right of entry to the  
41 property at reasonable times to allow for effluent sampling or evaluating the general state of  
42 repair or function of the system.

43 C. Wastewater systems that require secondary treatment levels be achieved shall be sampled and  
44 analyzed only for 5-day BOD quarterly for the first year, semi-annually for the second year,

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- 1 and yearly thereafter or as otherwise required by the county, to meet the requirements of the  
2 permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable  
3 calibration curve as approved by the county.
- 4 D. Wastewater systems that require tertiary treatment levels be achieved shall be sampled and  
5 analyzed only for total nitrogen quarterly for the first year, semi-annually for the second year,  
6 and yearly thereafter or as otherwise required by the county to meet the requirements of the  
7 permit.
- 8 E. Advanced systems requiring disinfection shall be sampled and analyzed for fecal coliform  
9 quarterly for the first year, semi-annually for the second year, and yearly thereafter or as  
10 otherwise required by the county. In addition:
- 11 1. when chlorine is used for disinfection, the total chlorine residual, at all times, shall be  
12 equal to or greater than 1.0 mg/l after thirty (30) minutes detention time at peak flows;  
13 and
- 14 2. alternative disinfection methods, such as ultraviolet light, ozone or other methods, may be  
15 utilized after county approval.
- 16 F. All sampling and analysis shall be performed by certified personnel in accordance with the  
17 most current edition of *Standard Methods for the Examination of Water and Wastewater* or  
18 other methods, including field instruments, approved by the county.
- 19 G. Sampling shall occur between the hours of 7:00 am and 7:00 pm.
- 20 H. Monitoring (sampling and analysis) reports shall be submitted to the county within thirty (30)  
21 days of the required sampling event.
- 22 I. All test results exceeding the permit limits shall be reported to the county within five (5)  
23 working days.
- 24 J. Sampling frequency for systems exceeding permit limits after the exceedance shall be  
25 quarterly for the first year, semi-annually for the second year, and yearly thereafter, unless  
26 otherwise specified in the permit.
- 27 K. If any two consecutive samples exceed the single sample limit, the system design and  
28 operation shall be evaluated by a professional engineer or a maintenance service provider for  
29 conformance with permitting conditions and shall be adjusted to bring the effluent quality  
30 into compliance.
- 31 L. If the 6-sample rolling average exceeds the treatment standards specified in Table 1, the  
32 treatment system shall be subject to review and re-evaluation with regard to operation and  
33 maintenance. A county approved contingency plan, including more training for the  
34 maintenance service provider or replacement with a more experienced operator, may be  
35 implemented.
- 36 M. The following shall be considered as violations of the monitoring requirements of the permit.
- 37 1. Failure to collect, analyze and report sampling results.
- 38 2. The submission, by the owner or maintenance entity of an advanced treatment system or  
39 agent or employee thereof, of fraudulent, misleading or inaccurate information to the  
40 county, through neglect.
- 41 3. The submission of fraudulent data including the following:
- 42 a. apparent measurement results for which no measurement or test results were actually  
43 made as determined by the absence of the supporting records that are usually made;

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- 1           b.    measurements or test results obtained by deliberately and knowingly making
- 2                    measurements or collecting samples at places and times other than as specified in the
- 3                    permit or Section 20.7.3 NMAC; and
- 4           c.    test results obtained through use of unapproved and erroneous sampling, preservation,
- 5                    storage or analysis procedures.
- 6

**Sec. 42-517. Operation and Maintenance Requirements and Inspection Requirements at Time of Transfer**

- 7   A. The owner of an wastewater system, including systems existing prior to the effective date of
- 8           this ordinance, shall be responsible for properly operating and maintaining the system in
- 9           accordance with the recommendations of the manufacturer or designer of the system.
- 10   B. The owner of an advanced treatment system installed after the effective date of this ordinance
- 11           shall enter into a county approved maintenance contract with a maintenance service provider
- 12           that will assure maintenance of the system in accordance with the recommendations of the
- 13           manufacturer or designer of the system through the life of the system. A maintenance
- 14           contract shall be in effect at all times.
- 15   C. Household hazardous waste and high strength waste shall not be introduced into the system.
- 16   D. Any spillage that may occur during tank pumpout shall be cleaned up immediately and the
- 17           spill area disinfected with a sodium or calcium hypochloride solution.
- 18   E. Prior to property transfer the owner shall have the wastewater system evaluated to prove the
- 19           system is in good operating condition and the buyer shall enter into a maintenance agreement
- 20           for the wastewater system. In addition, the buyer shall comply with Section 42-516
- 21           “Monitoring” of this ordinance.
- 22
- 23
- 24

**Sec 42-518. Maintenance Service Providers (MSP) for Conventional and Advanced On-Site Wastewater Systems**

- 25   A. Maintenance service providers (MSP) shall at a minimum:
- 26           1.    obtain certification by the National Association of Waste Transporters (NAWT) or
- 27                    equivalent;
- 28           2.    inspect, operate and maintain the system in accordance with the manufacturer’s
- 29                    specification; and
- 30           3.    submit pumping and inspection records upon request to the county.
- 31   B. The MSP personnel shall be certified by the manufacturer for the proprietary unit being
- 32           maintained.
- 33   C. The MSP personnel shall be trained in the proper operation and maintenance of the system.
- 34   D. The MSP personnel shall have the ability to sample the unit in accordance with approved
- 35           sampling methods under this part.
- 36   E. The MSP shall have in place a standardized quality assurance/quality control (QA/QC) plan.
- 37   F. The MSP shall be able to respond to emergency situations within forty-eight (48) hours of
- 38           being notified.
- 39   G. A private MSP shall use a maintenance contract that contains, at least, the requirements of
- 40           this ordinance and conditions of a wastewater permit.
- 41   H. The MSP shall meet minimum requirements, as promulgated by the county, for effective
- 42           operation, such as:
- 43
- 44

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1. reasonable response time;
2. appropriate equipment;
3. parts inventory;
4. quality assurance/quality control plan; and
5. insurance.

I. The MSP shall immediately notify the county of any failed system.

**Sec. 42-519. Expiration, Revocations, Revisions, Transfers, and Enforcement**

**A. EXPIRATION.**

1. Wastewater System Application and Permit.

A wastewater permit for a new installation shall expire one year from the date of issuance. If a permit expires a new application must be made for a new wastewater system permit.

2. Operating Permit.

Prior to the transfer of a property with an existing on-site wastewater system, the current system owner shall have the system inspected and evaluated by an inspector.

a. For conventional systems:

1. the sludge and scum levels shall be determined and the septic tank pumped as needed;
2. the effluent filters shall be cleaned and replaced if damaged or not found in place; and
3. the disposal area shall be visually evaluated for proper operation.

b. For advanced treatment systems;

1. the sludge and scum levels in the primary tank shall be determined and the tank pumped as needed;
2. the effluent filters shall be cleaned and replaced if damaged or not found in place if a filter is applicable to the system;
3. the disposal area shall be visually evaluated for proper operation.

c. Inspections shall be recorded on forms approved by the county. Inspection reports shall be kept on file by the inspector of the on-site wastewater system. Inspectors shall submit to the county copies of all inspection reports, whether completed or not, within 15 days of 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.

d. In the event of a failed system, that includes, but is not limited to disposal fields, the owner shall apply for a wastewater permit from the county before fixing the failed system.

3. Holding Tank Application and Permit.

A holding tank permit shall expire on the date noted on the permit, but in no instance shall that date be more than one year from the date of issuance. The permit may be renewed if sewer is not available.

4. Variance.

A variance approval shall expire on the date noted on the variance.

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1 B. REVOCATION OF A PERMIT OR APPROVAL: The county may revoke any permit or  
2 any approval issued under this ordinance for any false statements or misrepresentation of  
3 facts on which the permit or approval was granted. The permit or approval may also be  
4 revoked for violations of the permit or discharge plan in the course of installation,  
5 construction, modification, maintenance, or operation; or the violations of any conditions  
6 attached to the issuance of the permit or approval; or violations of this ordinance. Failure to  
7 allow inspections is grounds for revocation or denial of a permit. The revocation, the reasons  
8 for revocation, and any appeal rights shall be conveyed, in writing, to the owner of the  
9 property.

10 C. REVISIONS TO PERMIT: Installing a system that is different from the system permitted, or  
11 installing a permitted system under conditions that have changed, is prohibited, without first  
12 revising the permit. Making improvements to the property that result in a larger wastewater  
13 flow, covering the disposal system with impervious material, subdividing the property,  
14 adjusting a lot line, or modifying the proposed wastewater system are examples of the types  
15 of changes that require revision of the permit. Note: A revision of a permit pursuant to this  
16 section may require a modification of an approved Discharge Plan from State of New Mexico  
17 Environment Department, Ground Water Quality Bureau. In these instances, the owner or  
18 permittee shall submit to the county a request to revise the permit with the appropriate permit  
19 revision fee.

- 20 1. Revised plans and specifications, as well as a revised site plan, may be required when the  
21 changes involve:
- 22 a. Substituting a different treatment, holding, or disposal component for the component  
23 that was permitted; or
  - 24 b. Adding a treatment, holding, or disposal component.
  - 25 c. Change of location or configuration of the system.
- 26 2. Prior to the changes being made in the field, the county shall approve all substantive  
27 changes to the approved plans and specifications. The permittee shall not commence  
28 revisions in the field until written or verbal approval is obtained from the county.
- 29 3. If installer of wastewater system changes.

30 D. TRANSFERS

- 31 1. Applications for permits are not transferable.
- 32 2. The operating permit is not transferable.
- 33 3. A wastewater system or holding tank permit may be transferred to another installer if the  
34 following conditions are met:
- 35 a. All information pertaining to the siting, design, location, installation conditions, or  
36 modification of a wastewater system remains the same; and
  - 37 b. The name, address, and phone number of the proposed installer is provided to the  
38 county and the county approves the installer; and
  - 39 c. A revision of permit fee is paid.
- 40 4. A variance is not transferable.

41 E. PENALTIES AND ENFORCEMENT

- 42 1. Any violation of this ordinance is a petty misdemeanor subject to criminal penalties as  
43 authorized by NMSA 74-1-10.

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2. The county may appear and prosecute any misdemeanor proceeding if the appearance is by an employee authorized by the county to institute or cause to be instituted an action on behalf of the county.
3. The county, at its discretion, may elect to pursue criminal or civil penalties, or both, for any violations of this ordinance.
4. The operation or maintenance of any wastewater system, or portion of a system, or any discharge of wastewater in violation of any provision of this ordinance, which causes a nuisance, degrades or threatens to degrade surface or ground water, or creates a potential or actual health hazard, and is a public nuisance may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.
5. The county may contract with a maintenance person to provide services to a property which does not possess a valid maintenance contract and place a lien on the property to recover the county's costs.
6. Any person who violates any provision of this ordinance shall be punished by a fine not exceeding \$300.00, imprisonment for a term not exceeding 90 days, or both. Each day of violation may be considered a separate violation.
7. Violations of this ordinance that are continuous with respect to time are a public nuisance and may be abated by injunctive or other equitable relief. The imposition of a penalty does not prevent the granting of equitable relief.

**Sec. 42-520. Development Review**

A. BUILDING AND ZONING PERMITS: The county shall not issue a business license or issue a building (includes all technical codes permits) or zoning permit or approval associated with any lot which necessitates the use of a wastewater system, unless the county has approved the wastewater system to accommodate the wastewater flow and contaminant load and the setback requirements in Section 42-511, Table 6, are, or will be met. The applicant for any building or zoning permit or approval associated with a lot which has, or is proposed to have, a wastewater system shall provide documentation to the county for review by the county, showing the location and setback distances for the proposed use relative to all of the following:

1. Existing and proposed structures; and
2. Existing and proposed wastewater system treatment and disposal components; and
3. Existing and proposed building sewer lines; and
4. Existing and proposed swimming pools; and
5. Existing and proposed wells; and
6. Existing and proposed potable water lines; and
7. Existing and proposed paved surfaces; and
8. Existing and proposed driveways and parking locations.

**B. SUBDIVISIONS**

1. Subdivisions created after the effective date of this ordinance and containing five (5) or fewer lots shall, for lots less than 3/4 acre in size, shall have access to a community wastewater system at the property line for each lot which is less than 3/4 acre in size.

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**Sec. 42-521. Variances and Appeals**

**A. Variances**

1. Any owner seeking a variance from the requirements contained in this ordinance shall do so by filing a variance application form provided by the county. The application shall be:
  - a. Accompanied by relevant documents or materials which the applicant believes would support the application; and
  - b. Accompanied by documentation, including addresses, demonstrating that all owners of property sharing a common border with the lot for which the variance is sought have been notified of the nature of the variance application, the date of submission of the application to the county, unless all adjacent properties are more than 1,000 feet from the wastewater system for which the variance is sought; and
  - c. Accompanied by such other relevant information as the county may reasonably require; and
  - d. The application shall be completed in full, signed by the owner or the owner's authorized representative, if any, and accompanied by all required exhibits and fees. If the owner of a property uses an authorized representative, a signed statement from the owner of the property assigning authority for the representative to act on the owner's behalf during the application review process shall accompany the application.
2. The county shall, within 20 business days following receipt of the completed application and associated fee, respond to the application. The county shall grant the variance, grant the variance subject to conditions, or deny the variance. The county shall provide written notification to the applicant and any other person making a written comment concerning the application. The reason for the county's action shall be provided in writing.
3. The county shall deny the variance unless the applicant establishes by clear and convincing evidence that:
  - a. The variance application offers an alternative method or means of complying with the intent of the specific provision of this ordinance proposed for variance; and
  - b. The proposed wastewater system or modification of an existing system shall not, by itself or in combination with other wastewater systems or other discharges permitted under state or federal law, cause a hazard to public health or degrade any body of water; and
4. When reviewing variance applications the county may consider, among other matters, the geological and hydrological factors at the site, the current and future housing density in the area, and current and future use of the water that could be affected by the proposed system.
5. The variance shall specify the expiration date, the conditions of approval, and the conditions for renewal.
6. Denial of a variance may be appealed.
7. The county shall maintain a file of all variances granted and denied.
8. Obtaining a variance does not negate the need to obtain permits or approvals as required by this ordinance. The variance may be submitted as a supporting document.

- B. APPEALS:** Any affected person dissatisfied with an action taken by the county's decision on a permit application, variance, or revocation may appeal the decision by requesting a

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1 review by the Director. The request shall be made, in writing, to the county within fifteen  
2 (15) business days after notice of the county's action or decision has been issued. Unless an  
3 appeal is received by the county within fifteen (15) business days after notice to the applicant  
4 of the county's action, the decision of the county shall be final.

- 5 1. If an appeal is received within the fifteen (15) business day time limit, the director shall  
6 hold a hearing within fifteen (15) business days after receipt of the request. The county  
7 shall, in writing, notify the person who requested the hearing of the date, time, and place  
8 of the hearing. If the appeal is on a variance, the county shall, in writing, notify all  
9 persons who were sent notice of the variance application of the date, time and place of the  
10 hearing. In the hearing, the burden of proof shall be upon the person who requested the  
11 appeal.
- 12 2. Hearings shall be held at the offices of the county or other public facility.
- 13 3. The hearings shall be conducted so that all relevant views, arguments and testimony are  
14 fairly presented without undue repetition. The Director shall allow the county, the  
15 applicant and the person who requested the hearing to call and examine witnesses, to  
16 submit written and oral evidence and arguments, to introduce exhibits, and to cross-  
17 examine persons who testify. The rules of civil procedure and the rules of evidence shall  
18 not apply.
- 19 4. Based upon the evidence presented at the hearing, the Director shall sustain, modify, or  
20 reverse the action of the county. The Director's decision shall be in writing, and a copy of  
21 the decision shall be sent to the applicant and the person who requested the hearing. The  
22 decision shall serve as the final decision of the county.

23  
24 **Sec. 42-522. Severability**

25  
26 If any section, paragraph, sentence, clause, word, or phrase of this ordinance is for any reason  
27 held to be invalid or unenforceable by any court of competent jurisdiction, such decision shall  
28 not affect the validity of the remaining provisions of this ordinance. The Commission hereby  
29 declares that it would have passed this ordinance and each section, paragraph, sentence, clause,  
30 word, or phrase thereof irrespective of any provision being declared unconstitutional or otherwise  
31 invalid.

32  
33 **Sec. 42-523. Effective Date**

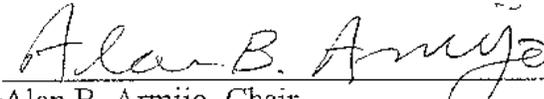
34  
35 This ordinance shall take effect thirty days after final adoption by the Bernalillo County  
36 Board of County Commissioners.

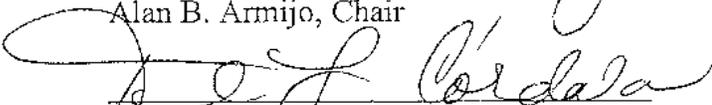
CONTINUATION PAGE 46: ORDINANCE NO. 2006-1  
AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-517 OF  
THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10,  
REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH  
AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR  
THE PERMITTING, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS;  
PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES

PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS THIS

24th DAY OF January, 2006.

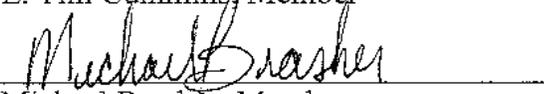
BOARD OF COUNTY COMMISSIONERS

  
Alan B. Armijo, Chair

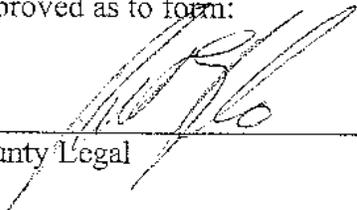
  
Teresa L. Cordova, Vice Chair

  
Deanna Archuleta-Loser, Member

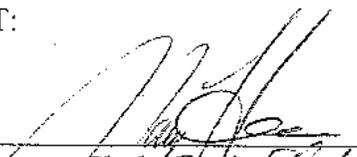
  
E. Tim Cummins, Member

  
Michael Brasher, Member

Approved as to form:

  
\_\_\_\_\_  
County Legal

ATTEST:

  
\_\_\_\_\_  
Mary Herrera, Clerk

Dated 1/24/06

