

MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE

CHAPTER II

SEWAGE AND WASTES

SECTION 8

ONSITE WASTEWATER TREATMENT FACILITIES

REGULATION 1. Definitions

- a. “Aggregate” means a clean graded hard rock, volcanic rock, or gravel of uniform size, 3/4 inch to 2-1/2 inches in diameter, offering 30% or more void space, washed or prepared to be free of fine materials that will impair absorption surface performance, and has a hardness value of three or greater on the Moh’s scale of hardness (can scratch a copper penny).
- b. “Aquifer Protection Permit” means an individual or general permit issued under A.R.S. §§ 49-203, 49-241 through 49-252, and Articles 1, 2, and 3 of Title 18, Chapter 9.
- c. “Aquifer Water Quality Standard” means a standard established under A.R.S. §§ 49-221 and 49-223.
- d. Cesspool shall mean a securely covered pit with sturdy open-jointed lining into which raw sewage is discharged for final disposal by digestion or leaching into the surrounding porous soil.
- e. “Daily Flow Rate” means the average daily flow calculated for the month that has the highest total flow during a calendar year.
- f. “Design Capacity” means the volume of a containment feature at a discharging facility that accommodates all permitted flows and meets all aquifer protection permit conditions, including allowances for appropriate peaking and safety factors to ensure sustained reliable operation.
- g. “Design Flow” means the daily flow rate a facility is designed to accommodate on a sustained basis while satisfying all permit discharge limitations and treatment and operational requirements. The design flow incorporates peaking and safety factors to ensure sustained, reliable operation.
- h. “Final Permit Determination” means a written notification to the applicant of the director’s final decision whether to issue or deny an aquifer protection permit.
- i. “Onsite Wastewater Treatment Facility” means a conventional septic tank system or alternative system installed at a site to treat and dispose of wastewater predominately of human origin, generated at that site. An onsite wastewater treatment facility does not include a pre-fabricated, manufactured treatment works

that typically uses an activated sludge unit process and has a design flow of 3000 gallons per day or more.

- j. “Setback” means a minimum horizontal distance maintained between a feature of a discharging facility and a potential point of impact.
- k. “Typical sewage” means sewage in which the total suspended solids (TSS) content does not exceed 430 mg/l, the five-day biochemical oxygen demand (BOD) does not exceed 380 mg/l, and the content of fats, oils, and greases (FOG) does not exceed 75 mg/l.
- l. “Gray water” means wastewater collected separately from a sewage flow that originates from a clothes washer, bathtub, shower, and sink, but does not include Wastewater from a kitchen sink, dishwasher, or toilet.
- m. “Gray water disposal system” means the on-site use and management of not more than 400 gallons of gray water per day and a system that complies with the requirements of Arizona Administrative Code R18-9-711.
- n. “Tank Riser” means a watertight extension of the septic tank access opening to within six (6) inches of finished grade and removable watertight cover, or above grade with gas tight cover.
- o. “Disposal Area Riser” means a vertical pipe installed from the bottom of the onsite wastewater system disposal area, perforated within the disposal area, and extended to within six (6) inches of finished grade or above with an accessible cap that allows periodic inspection.
- p. “Notice of Intent to Discharge” or “NOID” means a request to begin the process to receive a discharge authorization under aquifer protection permit rules.
- q. “Phase I” means site and soils investigation in preparation for NOID application to install a septic system.
- r. “Phase II” means the application for a notice of intent to discharge.

REGULATION 2. Permit to Install Required

- a. No person may install, materially alter, or add to any on-site wastewater treatment facility without first applying for and obtaining a written approval from the Department.
- b. The construction approval shall expire two (2) years after the date of issue unless, before the permit expires, construction of the facility or system is complete and has been inspected and approved by the Department.
- c. Department approval is required for the abandonment or closure of an onsite wastewater treatment facility and the abandonment or closure shall comply with

closure requirements in the regulations of Arizona Department of Environmental Quality.

- d. A general application for site investigation, site and test hole inspection, miscellaneous review/reconnect plan reviews, or septic system abandonment/closure shall expire one (1) year from date of application and/or one (1) year from Phase I Site Approval.

REGULATION 3. Approval to Operate Required

- a. Work shall conform to plans and be in compliance with this Code and the regulations of the Arizona Department of Environmental Quality.
- b. The Environmental Health Officer shall make necessary inspections of installations and when satisfied that an installation complies with this Code, and regulations of the Arizona Department of Environmental Quality, shall issue written approval to the permittee.
- c. Operation and use of an on-site wastewater treatment facility shall not commence before final inspection has been made and approved, all permit fees are paid, all required documents have been received, and written approval has been issued by the Department.

REGULATION 4. General

All onsite wastewater treatment facilities must conform to the applicable general provisions relating to sewage and waste disposal, and with the specific provisions of this section.

- a. Onsite wastewater treatment facilities are prohibited:
 - 1. When connection may reasonably and practicably be made to an approved municipal, community, or similar sewerage system. When installation of a municipal, community, or similar sewerage system or extension, to which connection may be made, is imminent, the Department may waive the full application of these regulations and permit the installation of temporary sewage disposal facilities for premises or subdivisions. In such cases, the Department shall stipulate the conditions and limitations it deems necessary to protect the public health, and to insure speedy connection to the sewerage system, and the owner and operator of such temporary facilities shall be bound to these stipulations and conditions;
 - 2. When soil conditions, topography, or other conditions are such that an onsite wastewater treatment facility cannot be expected to function satisfactorily, or where ground water or soil conditions are such that an onsite wastewater treatment facility may cause pollution of ground water;
 - 3. When such installation may create an unsanitary condition or public health nuisance.
- b. The use of cesspools is prohibited.

- c. The installation of onsite wastewater treatment facilities in new subdivisions, establishments, or premises, is prohibited where such subdivisions, establishments, or premises are contiguous to an approved sewerage system to which connection may reasonably and practically be made.
- d. The use of an onsite wastewater treatment facility by more than one (1) property, dwelling, commercial unit or other premises is prohibited unless it can be shown to the satisfaction of the Environmental Health Officer that such properties, dwellings, commercial units or premises are constructed, designed and located in such a manner that it is impossible to construct separate onsite wastewater treatment facilities for them.
- e. In areas served by a municipal or other approved sewage disposal system, when an onsite wastewater treatment facility fails, and in the opinion of the Department, a public health nuisance arises as a result of such failure, (1) the plumbing system of the premises shall be disconnected from the defective onsite wastewater treatment facility and forthwith connected to the approved sewage disposal system, (2) the onsite wastewater treatment facility shall comply with closure requirements in the Arizona Department Of Environmental Quality Rules and ~~be~~ of the Department.
- f. The effluent from onsite wastewater treatment facilities may not discharge onto the surface of the ground, into any water course, abandoned well, pit, mine or similar excavation, or anywhere it may pollute, tend to pollute or create a hazard to any potential or actual water supply or water supply system, industrial wastes shall not be discharged into any onsite wastewater treatment facility without the written approval of the Department.
- g. All back filling shall be done with clean earth, free of large stones, broken masonry, stumps, waste construction materials, etc., and accomplished in such a manner as to minimize settling and to avoid placing undue strain on the system.
- h. If water or a limiting layer is encountered during excavation for test holes or during onsite wastewater treatment facility installation, the work shall be suspended immediately and revised plans submitted to the Department for approval.
- i. Hair and lint traps shall be installed on drains connected to an onsite wastewater treatment facility for hair salons, commercial laundry facilities, and pet and horse grooming facilities.

REGULATION 5. Minimum Requirements for the Design, Installation, Site Investigation, and Operation of Onsite Wastewater Treatment Facilities and Gray Water Disposal Systems.

- a. The owner of any of the following types of onsite wastewater treatment plant is required to submit an annual maintenance record on a form provided by the Department and pay a fee as listed in Chapter I, Regulation 5 of this Code:

- (1) Aerobic treatment system
 - (2) Sequencing batch reactors
 - (3) Systems requiring disinfecting devices, and
 - (4) Systems with maintenance requirements prescribed by the manufacturer.
- b. The following provisions of The Arizona Administrative Code (“A.A.C.”), including all revisions, technical corrections, and supplements published as of March 31, 2010, are incorporated into this Environmental Health Code by reference:
- Title 18 Chapter 9 Section 110. (R18-9-110.);
Section A301. A.4. (R18-9-A301.A.4);
Section A301. B. (R18-9-A301 B.);
Section A301. D. (R18-9-A301.D.);
Section A302. (R18-9-A302.);
Section A303.A. (R18-9-A 303.A.);
Section A304. (R18-9-A304.);
Section A305.B. (R-18-A305.B.);
Sections A306. through A309 D. and A309F, (R18-9-A306 through R18-9-A309.D and A309F);
Sections A310. through A316. (R18-9-A310 through R18-9-A316.);
Sections E301 through E323. (R18-9- E301 through R18-9-E323.);
Section 711 (R18-9-711).
- c. Copies of the A.A.C. Rules adopted by reference in Subsection b above are available from the Arizona Secretary of State.
- d. For the purpose of this Code, references to “Department” in Title 18 Chapter 9, means the Maricopa County Environmental Services Department.

REGULATION 6. Site Safety

- a. In order to protect humans and animals at the installation site, the property owner, its authorized agent, and its contractor(s) shall be responsible for installation site safety for work performed under the rules of this Section.
- b. Test holes shall be secured by placing protective signage, equipment, barriers, and/or by covering the test holes. Test holes shall be backfilled and compacted immediately after the property owner, its authorized agent or its contractor has been informed that the site investigation has been completed. Test holes shall remain secured at all times.
- c. Installation sites shall be secured with signage, equipment, and/or barriers appropriate to the site.
- d. If any newly-constructed or modified portion of an onsite wastewater treatment facility requiring inspection is receiving or has received wastewater discharge, notice shall be given to the Department at the time of the inspection request.
- e. If any newly-constructed or modified portion of an onsite wastewater treatment facility requiring inspection is receiving or has received wastewater discharge, the

property owner, its authorized agent or its contractor(s) shall be present at the site during the inspection. The property owner, its authorized agent or its contractor(s) shall provide an appropriate measuring device, disinfectant, and any other equipment deemed necessary by department personnel performing the inspection.