

of a multi-family dwelling owned by one person, patio, balcony, hallway, or stairwell of a structure or premises, a person shall not store or accumulate a motorcycle, moped, gasoline-powered lawnmower, or other similar equipment that may contain a hazardous material including, without limitation, gasoline.

(C.B. 63, 2004; C.B. 80, 2006, §§ 1, 2)

SUBTITLE 8. ON-SITE SEWAGE DISPOSAL SYSTEMS

Sec. 3.800. Authority; application; purpose.

(a) *Authority.* This subtitle is enacted pursuant to provisions of section 10-103 of the environment article of the Annotated Code of Maryland and provisions of the Code of Maryland Regulations that regulate on-site sewage disposal systems.

(b) *Application.* This subtitle sets forth the minimum requirements that apply to on-site sewage disposal systems for homes and other establishments in howard county where a public sewerage system is not available. All on-site sewage disposal systems shall be constructed, added to, or altered in accordance with this subtitle.

(c) *Purpose.* The purpose of this subtitle is to protect the public health, safety, and welfare by establishing requirements and procedures for the ownership, operation, repair, and maintenance of on-site sewage disposal systems.

(Ord. No. 81, 2006, § 1)

Sec. 3.801. Definitions.

Terms used in this subtitle have the meanings indicated.

(a) *Approving Authority.* For on-site sewage disposal systems regulated by this subtitle, the approving authority is the Health Officer for Howard County or the Health Officer's designee.

(b) *Bedroom.*

(1) Except as provided in paragraph (2) of this subsection, a bedroom is any space in the conditioned area of a dwelling unit or accessory structure that:

(i) Is 90 square feet or greater in size;

(ii) May be used as a private sleeping area; and

(iii) Has at least one window and one interior door.

(2) If a home office, library, or similar room is proposed, it may not be a bedroom if there is no closet; and

(i) The room contains permanently built-in bookcases around the perimeter of the room, desks, and other features that encumber the room;

(ii) A minimum 4 foot-wide opening, without doors, into another room;

(iii) A half wall (4 foot maximum height) between the room and another room; or

(iv) The room is a first floor room or basement area that does not have direct access to full bathrooms or "roughed in" plumbing that would provide direct access to future full bathroom facilities.

(c) *COMAR.* The Code of Maryland Regulations.

(d) *Conditioned Space.* An area, room, or space normally occupied and being heated or cooled by any equipment for human habitation.

(e) *Domestic Sewage.* The liquid or water-carried wastes (including gray water and water treatment backwash) from all buildings including, but not limited to, residential buildings, bathhouses, clubhouses, floating homes, commercial buildings, and institutions.

(f) *Lot.* "Lot" shall have the meaning stated in COMAR.

(g) *Minor Septic Repair Permit.* A permit issued for minor repairs or replacement made to an existing septic system component including the septic tank, distribution box, piping, or lift pump station.

(h) *Mound System.* An on-site sewage disposal system utilizing a raised bed of sand fill with a distribution system constructed so as to distribute sewage equally over the ground surface located under the base of the mound.

(i) *Nuisance.* Nuisance has the meaning stated in section 12.110 of the Howard County Code.

(j) *On-Site Sewage Disposal.* Disposal of sewage effluent beneath the soil surface at the site of its origination.

(k) *On-Site Sewage Disposal Permit.* A permit issued for the installation, design, and disposal of domestic sewage.

(l) *On-Site Sewage Disposal System.* All private methods of collecting, treating, and disposing of domestic sewage at the site of its origin including, septic tanks, privies, chemical toilets, alternative on-site systems and others.

(m) *Person.* An individual, corporation, partnership, business trust, limited liability company, or any other type of business entity.

(n) *Shared System.* A water or sewerage system that serves more than one lot of land or more than one user on a single lot of land with water or sewerage systems located on the individual lots or on parcels owned in common by the users or a controlling authority.

(o) *Waiver.* A modification to a provision of this subtitle granted by the approving authority. (Ord. No. 81, 2006, § 1)

Sec. 3.802. Requirement to connect to public sewer.

Except for property located outside the planned service area for sewer service and the metropolitan district, whenever a public sewer main for public use exists in any street or alley that directly abuts a property, each owner of a building constructed for human habitation, occupancy, or use shall connect to the public sewer main where it is legally and economically available in accordance with this subtitle and section 12.105 of the Howard County Code. (Ord. No. 81, 2006, § 1)

Sec. 3.803. Waiver.

The approving authority may grant a waiver of a provision of this subtitle that is more stringent than the standards set forth in COMAR for unusual circumstances or extraordinary hardships where the approving authority believes that the

modification is in compliance with the intent and purpose of this subtitle and that the modification does not lessen the health or environmental requirements of this subtitle and the requirements of COMAR 26.04.02. (Ord. No. 81, 2006, § 1)

Sec. 3.804. General provisions.

(a) *Disposal Methods.*

(1) *Domestic sewage.* All domestic sewage shall be disposed of by an approved method of collection, treatment, and effluent discharge in accordance with COMAR and this subtitle. It is a violation of section 12.110(a)3 of the Howard County Code to improperly dispose of domestic sewage.

(2) *Human body wastes.* Where water under pressure is not available, all human body wastes shall be disposed of by depositing them in approved privies, chemical toilets, or other installations that meet the standards of this subtitle and COMAR.

(3) *On-Site Sewage Disposal Systems.* Water-carried sewage from bathrooms, kitchens, laundry fixtures, and other household plumbing shall pass through a septic or other approved sedimentation tank prior to its discharge into the soil. Where conventional sewage disposal systems are not feasible, consideration may be given to non-conventional methods of collection, treatment, and disposal. A food waste grinder connected to a sink may not be connected to a domestic on-site sewage disposal system. It is the owner's responsibility to maintain an on-site sewage disposal system as installed and to avoid creation of a public health nuisance.

(b) *Responsibility.* Any person who owns, installs, alters, or constructs an on-site sewage disposal system including, but not limited to, an owner, plumbing contractor, or sewage disposal system contractor, are jointly and severally responsible for compliance with this subtitle and for fulfilling the requirements of the design for the construction, addition, or alteration of on-site sewage disposal systems approved by the approving authority.

(c) *Prohibited Methods of On-Site Sewage Disposal.*

- (1) *Cesspool or septic tank.* A cesspool, septic tank, or other means of private sewage disposal is not permitted wherever a sewer under public ownership adjoins the property in question. Each existing cesspool or other means of on-site sewage disposal shall be eliminated and abandoned. It is the owner's responsibility that abandoned sewage disposal systems are disconnected from the buildings, pumped out, and filled with earth.
- (2) *Insufficient Lot Area or Improper Soils.* When the approving authority finds there to be insufficient lot area or improper soil conditions for adequate sewage disposal for the building or land use proposed, a building permit shall not be issued and an on-site sewage disposal system shall not be permitted.

(d) *Additions, Alterations and Changes.* On-site sewage disposal systems serving existing structures, for which additions, alterations, or changes in use are proposed, shall be determined by the approving authority as capable of handling existing and reasonably foreseeable increases in sewage flow based on soil permeability rate, amount, and type of usable soils, water table depth, use of property, and maximum sewage flow as outlined in the provisions of this subtitle.

(e) *Construction Materials.* Materials of construction shall be as indicated in this subtitle and the National Standard Plumbing Code (2006), as adopted in Subtitle 3 of this title of the Howard County Code. Where materials are not shown or indicated by a standard or by a recognized testing agency specification, materials shall conform to the standards sited in the National Standard Plumbing Code (2006), as adopted in Subtitle 3 of this title of the Howard County Code.

(f) *Insanitary Conditions—Approval of Other Methods.* When there are existing public health hazards due to insanitary conditions caused by malfunctioning on-site sewage disposal systems and the unsanitary conditions cannot be eliminated through the use of conventional sewage disposal systems, the approving authority may

grant a waiver to the requirements of this subtitle in accordance with section 3.803 and COMAR and may approve the installation of non-conventional sewage disposal systems.

(g) *Separation of Ground Water.* The separation to the ground water shall be maximized for the installation of an on-site sewage disposal system and shallow system designs shall be required where feasible.

(h) *Approving authority.*

(1) *Generally.* Wherever the provisions of this subtitle are more strict than the requirements contained in comar, the approving authority shall administer, enforce, and interpret the provisions of this subtitle and may adopt minimum standards in accordance with this subtitle and comar for the design and construction of on-site sewage disposal systems in the implementation of this subtitle.

(2) *Stricter standards.* Nothing contained in this subtitle shall be construed to prevent the approving authority from requiring compliance with more strict standards than those contained herein where such stricter standards are essential to maintain a safe and sanitary condition.

(Ord. No. 81, 2006, § 1)

Sec. 3.805. PERC certification plan requirements.

(a) *PERC Certification Plan.* Except as provided in paragraph (1) of this subsection, before a building permit is issued, a PERC certification plan shall be submitted and approved that complies with the provisions of this subtitle.

- (1) A building permit may be exempt from a PERC certification plan when the proposed structure:
 - (i) Does not increase the amount of living space;
 - (ii) Is less than 250 square feet and is not a garage; and
 - (iii) The existing on-site sewage disposal system is adequate for the existing property use.

- (2) A required PERC certification plan shall contain the following.
- (i) Identification of the property, road, street address if applicable, tax map page, parcel number, subdivision name (if appropriate); a purpose statement as appropriate (re-subdivision, sda adjustment, etc.).
 - (ii) Name, address, and telephone number of the owner, developer, and the person preparing the plan.
 - (iii) The date the plan was drawn, the plan scale (1:30 — 1:100), a scaled vicinity map and if not a preliminary plan, the PC # (percolation test fee receipt number, referenced in the approving authority correspondence).
 - (iv) Health Officer signature block conditioned with "approved for private water and private sewerage systems."
 - (v) Existing and any proposed property lines.
 - (vi) Except for staked holes not dug, all excavated test holes observed by the approving authority, identified according to the original percolation testing proposal, or, as otherwise identified at the time of testing.
 - (vii) Actual surveyed elevation (not based on county aerial topography) of each test hole.
 - (viii) Legend symbols to distinguish holes, which passed, failed, or were held for future review (e.g., for wet season).
 - (ix) Legend symbols to distinguish between existing holes previously documented and new holes.
 - (x) For lots created after March 1972, proposed minimum 10,000 sq. ft. sewage disposal area for each lot and for lots created before March 1972, proposed adequate area for an initial system and 2 repairs.
 - (xi) Field verified/field run topography at two-foot intervals and statement certifying such. One-foot intervals are required for mound systems and systems with pipe depth less than two feet.
 - (xii) Existing structures, wells, septic systems and sewage easements (list use and intent designated for each).
 - (xiii) Three (3) proposed well sites or 1500 sq. ft. of well zone with elliptical radius of 100 feet around the entire set/well zone for each lot.
 - (xiv) If required, certification that a groundwater appropriations permit will be issued and all wells will be drilled prior to plat.
 - (xv) Identification of streams, ponds, floodplains, 25% and greater slopes, soil types and soil type boundaries.
 - (xvi) Suitable house site (55 feet × 70 feet) and driveway with building restriction lines as determined by other county agencies.
 - (xvii) All existing wells, septic systems and sewage disposal easements within 100 feet of property boundaries and a note stating such. All existing and proposed wells, septic systems and sewage disposal systems that are located within 200 feet down gradient of existing or proposed septic systems and sewage disposal easements. The engineer shall use all reasonable efforts to find the location of all surrounding wells and septic systems and a note stating such.
 - (xviii) Professional seal or signed statement that "I certify that the information shown hereon is based on field work performed by me or under my direct supervision, and is correct, to the best of my knowledge and belief."
 - (xix) Include the following statement "any changes to a private sewage easement shall require a revised perc certification plan."

(xx) one of the following statements as applicable:

- a. "*MDE sewage easement statement for lots created after march 1972*: This area designates a private sewage easement of at least 10,000 square feet as required by the maryland department of environment for individual sewage disposal. Improvements of any nature in this area are restricted. This easement shall become null and void upon connection to a public sewerage system. The county health officer shall have authority to grant adjustments to the private sewage easement. Recordation of a revised sewage easement shall not be necessary."; or
- b. "*MDE sewage disposal area statement for lots created before March 1972*: This area designates a private sewage disposal area as required by the Maryland Department of Environment for individual sewage disposal. Improvements of any nature in this area are restricted. This sewage disposal area shall become null and void upon connection to a public sewerage system. The County Health Officer shall have authority to grant adjustments to the private sewage disposal area."

(xxi) For proposed subdivisions and retests of lots created after November 1985, certification of compliance with MDE ownership width requirements and the statement that "the lot(s) shown hereon complies/comply with the minimum ownership width and lot area as required by the Maryland Department of Environment."

(Ord. No. 81, 2006, § 1)

Sec. 3.806. Permits required.

(a) *On site sewage disposal permit; minor septic repair permit.*

- (1) *When required.* Where a public sewage disposal system is not available and construction is contemplated for a building for human occupancy or use, or an addition to or alteration of any existing on-site sewage disposal system is proposed, the master plumber, disposal system contractor, or owner shall, prior to beginning any construction, make an application to the approving authority for a minor septic repair permit or an on-site sewage disposal permit in accordance with the requirements of this section and section 12.106(a) of the Howard County Code in order to perform the necessary installation or modification to the existing on-site sewage disposal system.
- (2) *Percolation test application.* Before a permit to make the desired installation is issued, a percolation test application, in a form required by the approving authority, shall be obtained and approved. For single family dwellings where it is necessary to replace an existing component of the septic system other than the soil absorption component, a percolation test application will not be required in order to obtain a minor septic repair permit. The approving authority shall require a soil evaluation, including percolation and other pertinent tests, to be conducted under its supervision, with such information to be made a part of the application.
- (3) *Percolation test rate results.* The conventional percolation test rate may range between 2 and 30 minutes per inch or up to 60 minutes per inch for a conventional sand mound system. The results of percolation tests shall be considered in conjunction with available information on topography, soil type and conditions, surface and subsurface drainage conditions, water table level, the history of failing septic systems in surrounding areas, and soil map data.

- (4) *Approval of Percolation Test Application.* The percolation test application may be approved when the percolation certification plan is signed or, if a percolation certification plan is not required, other demonstration of adequate area for on-site sewage disposal is provided. The percolation test application is valid for 2 years from the date of payment of the required application fee. The signed percolation certification plan shall remain valid unless changes to the percolation certification plan are required.
- (5) *Changes to a signed percolation test plan.* Changes to a signed percolation certification plan after the percolation test application has expired may require a new percolation test application. Changes to the signed percolation certification plan that require additional testing shall require a new percolation test application.
- (6) *Issuance of on-site sewage disposal permit.* An on-site sewage disposal permit may be issued when a site plan submitted with the building permit application is approved.
- (7) *Duration of permit.* An on-site sewage disposal permit and a minor septic repair permit expire one year from the date of issuance.
- (8) *Denial of permit.* An on-site sewage disposal permit or minor septic repair permit shall be denied when, upon review of the application and required site plan, the approving authority finds that:
 - (i) The proposed design is inadequate to collect, treat and dispose of domestic sewage and effluent discharge in accordance with the standards set forth in this subtitle;
 - (ii) Soil and geological conditions are such as to preclude safe and proper operation of the desired installation; or
 - (ii) The construction would be detrimental to the general health and welfare of the residents or the environment.
- (9) *Installation without permit not allowed.* Installation shall not be made without first obtaining a written on-site sewage disposal permit from the approving authority.
- (10) *Inspections.* The approving authority may make inspections during construction to determine compliance with this subtitle. No part of any installation shall be covered until approval by the approving authority has been granted. Any part of an installation that has been covered prior to final approval shall be uncovered upon order of the approving authority. Final written approval shall not be given until all pertinent data required has been submitted.
- (11) *Final approval.* The onsite sewage disposal system shall not be put into use until final approval of the system installation has been granted by the approving authority.
 - (b) *Sewage Scavenger Vehicle.*
 - (1) *Permit required.* Each sewage scavenger vehicle that collects domestic sewage within Howard County shall obtain a sewage scavenger permit from the approving authority and pay the corresponding fee. Each permit issued is valid for one year from the date of issuance.
 - (2) *Inspection.* Each sewage scavenger vehicle to be issued a sewage scavenger permit to operate within Howard County shall first be inspected and approved by the approving authority. Inspections shall occur at the Office of the County Health Department (Environmental Health) unless an alternate site is mutually agreed upon prior to the inspection date. All company and vehicle information, along with an assessment of the operational functions of the vehicle, shall be required to complete the inspection process.

(Ord. No. 81, 2006, § 1)

Sec. 3.807. Design of an on-site sewage disposal system.

- (a) *Design Considerations.* The design of an on-site sewage disposal system shall take into consideration location with respect to wells or

other sources of water supply, topography, water table, soil characteristics, area available, maximum occupancy of the building, and facilities requiring water usage and the necessity for water treatment equipment.

(b) *Type of System.* The type of on-site sewage disposal system to be installed shall be determined on the basis of location, soil permeability, ground-water elevation, sewage flow, and any other limiting conditions identified by the approving authority.

(c) *Sanitary Sewage.* The on-site sewage disposal system shall be designed to receive all sanitary sewage including laundry waste from a building. Backwash effluent from a swimming pool, spa, or water treatment equipment may be directed to an on-site sewage disposal system on a case by case basis. Drainage from a basement floor, sump pump, footing, or roof shall not enter the system. Separate on-site sewage disposal systems may be required for backwash effluent from a swimming pool, spa, or water conditioning equipment.

(d) *Discharge.* Treated sewage effluent may be discharged into the ground or through methods acceptable to the approving authority.

(e) *Design criteria.* The tables set forth in this subsection establish the minimum design criteria for determining sewage flows according to type of establishment or size of house.

(1) *Flow rates.* Except single family dwellings on a shared system, the flow rates for individual homes shall include the use of all household appliances, except a food waste grinder flow rates shall be based on 150 gallons per day per bedroom.

(2) *Wastewater flow-on-site sewage disposal systems for uses other than certain single family dwellings.* Wastewater flows shall be determined based on the square footage of the building and the existing or proposed use. All uses shall be considered in determining wastewater flows. Wastewater flows shall be in accordance with the following table:

Wastewater Flow Criteria for Designing On-Site Sewage Disposal Systems for Uses Other Than Single Family Dwellings that Are Not on a Shared System

| <i>Establishment</i> | <i>GPD* per Unit</i> |
|---------------------------------|------------------------------|
| Airport: | |
| Per employee | 15 |
| Per passenger | 5 |
| (add for food service facility) | |
| Animal shelter/kennels: | |
| Per run | 25 |
| Add per employee/shift | 15 |
| Assisted living facilities | 100/bed |
| Banks | .04** |
| Beauty/barber shops: | |
| Per station | 350 |
| Bowling alley: | |
| Per employee | 15 |
| Per lane, no bar/food | 75 |
| Per lane, bar only | 125 |
| Per lane, bar & food | 200 |
| Car wash | Per equipmnet specifications |
| Community colleges: | |
| Per employee and student | 15 |
| (Add for food service) | |
| Church/assembly hall: | |
| Per seat | 3 |
| (Add for food service) | |
| Country club: | |
| Per seat member per room | 100 |
| Per non-resident | 25 |
| Department store: | |
| With lunch counter | .08** |
| Dinner theatre | 20/seat |
| Dance hall/night club | 5/occupant |
| (Add for food service) | |
| Day care (per child): | |
| Family | 20/child |
| Group | 25/child |

| <i>Establishment</i> | <i>GPD* per Unit</i> | <i>Establishment</i> | <i>GPD* per Unit</i> |
|---|----------------------|---|---------------------------|
| Dentist office: | | Visitor center per parking space | 45 |
| Per chair | 450 | | |
| Low water use equipment | .09** | Prison/jail: | |
| Drive in theater: | | Per bed space | 125 |
| Per car space | 5 | Per employee/shift | 15 |
| Drug stores | .13** | Residential apartments, condominiums, or single family dwellings on a shared system | 150/bedroom 75/bedroom |
| Dry goods store | .05** | Rooming/boardings | |
| Factory (manufacturing plant): | | Restaurant: | |
| Per employee/per shift | 15 | 24-hour operation or fast food | 75/seat |
| Add for showers per employee | 10 | Interstate/major highway 12-hour operation | 150/seat 50/seat |
| Fairground: | | Bar/tavern/pub | 25/seat |
| Per person | 5 | Banquet rooms | 5/seat |
| Golf course (public): | | Carryout service | 600 |
| Per 18 holes | 3500 | Deli/convenience store | 600 |
| Hospital | 350/bed | Retail stores | .05** |
| Laundry (coin operated): | | Schools (per student): | |
| Per machine/per 24 hours | 400 | No food or showers | 15 |
| Marinas: | | Add for food | 5 |
| Per slip, less than 25 feet | 10 | Add for showers | 10 |
| Per slip, 25—35 feet | 25 | Boarding | 100 |
| Per slip, greater than 35 feet | 75 | Service stations: | .18** |
| Boatels (per slip/space—divide by 3) | 15 | State highway rest area (mini station) | 2000 |
| Pump out station (per slip) (Storage volume only) | 35 | Shopping centers | .18** |
| Medical office building | .62** | Spas/saunas/jacuzzi | 20% of volume |
| Motel or hotel: | | Sports arena (add for food service) | 5/seat |
| Per unit (no food, no kitchen) | 125 | Supermarkets | .2** |
| Per unit (with food/kitchen efficiency) | 200 | Swimming pools: | |
| Nursing home | 200/bed | Per swimmer | 10 |
| Office buildings | .09** | Per employee | 15 |
| Parks: | | Theater/arena: | |
| Per person (with toilets provided) | 10 | Per seat, no food (Add for food service) | 5 |
| Add for showers | 10 | Travel trailer park/camps: Per Space | 150 |

| | |
|---------------------------------------|----------------------|
| <i>Establishment</i> | <i>GPD* per Unit</i> |
| Per space with sewer/service building | 175 |
| Children's camp | 50/person |
| Labor camp | 50/person |
| Luxury camp | 100/person |
| Day camp (no meals) | 15/person |
| Warehouse | .03** |

*Gallons per day

**Gallons per day per square foot
(Ord. No. 81, 2006, § 1)

Sec. 3.808. Location of on-site sewage disposal system.

(a) *Required Minimum Lot Size Where Public Water is Available.* Where public water is available, the minimum lot size in which an on-site sewage disposal system may be installed shall conform with comar requirements.

(b) *Required minimum lot size with private water system.* Where public water is not available, the minimum lot size in which an on-site sewage disposal system may be installed shall conform with COMAR requirements.

(m) *Distances.* The following minimum well and septic related distances shall be observed in locating the various components of the on-site sewage disposal system and any required replacement areas:

| | |
|--|-----------------------------|
| | <i>Distance in Feet</i> |
| Well to septic tank/system/septic easement | 100 |
| Well to new foundations | 30 |
| Well to pool | 20 |
| Well to deck | 10 |
| Well to roads | 15 |
| Well to driveways | 10 |
| Well to lot lines | 10 |
| Well to above ground liquid propane tank | 10 |

| | |
|---|-----|
| Well to below ground liquid propane tank | 100 |
| Well water line to septic tank/system/easement | 10 |
| Well water line to pool | 10 |
| Well to tennis court | 10 |
| Septic easement to house/sunroom . | 20 |
| Septic easement to pool | 20 |
| Septic easement to garage | 20 |
| Septic easement to deck/patio (not built on a foundation) | 5 |
| Septic easement to liquid propane tank | 5 |
| Septic easement to tennis court | 10 |
| Septic easement to lot lines | 10 |
| Septic tank to house without basement | 10 |
| Septic tank to house with basement | 20 |
| Septic tank to pool | 10 |
| Septic tank to garage | 10 |
| Septic tank to deck | 5 |
| Septic tank to liquid propane tank . | 5 |
| Septic tank to tennis court | 5 |
| Storm water infiltration device to well | 100 |
| Storm water non-infiltrative device to well | 50 |
| Storm water management to septic easement | 25 |

(d) *Site Requirements.* Each on-site sewage disposal system shall conform with the following general principles regarding site:

- (1) On-site sewage disposal systems shall be located at the point lower than the ground elevation of the well on the premises consistent with the general layout, topography, and surroundings, including abutting lots.

- (2) Locations at a higher elevation may be used with the specific permission of the approving authority.
- (3) On-site sewage disposal systems (and designated sewage disposal area) shall not be located up gradient of existing or proposed water wells within 200 feet.

- (3) The size of the subsurface disposal system can be obtained from the following table for commercial and institutional establishments and single family dwellings on a shared system:

Conventional Commercial, Institutional, or Single Family Dwellings on a Shared System Subsurface Septic System Wastewater Application Rates

| <i>Percolation Rate Min./Inch</i> | <i>Application Rate gpd/sq. ft.</i> |
|---------------------------------------|---|
| Less than 2 | Not suitable* |
| 2—15 | 0.8* |
| 16—30 | 0.6* |

*EPA Design Manual Onsite Wastewater Treatment and Disposal System, U.S. Environmental Protection Agency, Office of Water Program Operations, Office of Research and Development Municipal Environmental Research Laboratory, October 1980.

Note: For commercial, industrial, or single family dwellings on a shared system, advanced pretreatment may be used to resolve design issues and may increase the application rate, but in no case greater than 1.2 gpd/sq. ft.

(c) *Number and Adequacy of Observations.* An adequate number of percolation and other pertinent observations, as required by the approving authority, shall be conducted within the area designated for the on-site sewage disposal system so as to determine that the area is suitable for sewage disposal. For each 10,000 sq. ft. of sewage disposal area (proposed or approved) five percolation or observations are required proximate to the area designated for the on-site sewage disposal system. This may be waived or altered by the approving authority based on soil conditions.

(D) *Additional testing.* The approving authority may require additional percolation testing:

- (1) Where soil texture or structure varies or limiting geologic conditions are encountered; or

(e) *Waiver or modification.* The approving authority may waive or modify the requirements of this section for existing lots of record in Howard County in accordance with the waiver requirements set forth in section 3.803 of this subtitle. (Ord. No. 81, 2006, § 1)

Sec. 3.809. Percolation test.

(a) *Percolation testing.* Percolation tests to determine the absorption capacity of soil for septic tank effluent shall be conducted in accordance with this section and the results interpreted in accordance with this section.

(b) *Application Rates.*

- (1) The percolation rate is the number of minutes for a one-inch drop after prewetting is noted.
- (2) The size of the subsurface disposal system can be obtained from the following table for individual residences except single family dwellings on a shared system:

Conventional Single Family Residential, Except Single Family Dwellings on a Shared System, Subsurface Septic System Wastewater Application Rates

| <i>Percolation Rate Min./Inch</i> | <i>Application Rate gpd/sq. ft.</i> |
|---------------------------------------|---|
| Less than 2 | Not suitable* |
| 2—5 | 1.2* |
| 6—15 | 0.8* |
| 16—30 | 0.6* |

*EPA Design Manual Onsite Wastewater Treatment and Disposal System, U.S. Environmental Protection Agency, Office of Water Program Operations, Office of Research and Development Municipal Environmental Research Laboratory, October 1980.

(2) When the approving authority deems it necessary to evaluate a larger disposal and recovery area for the estimated sewage flow.

(e) *Rates Slower Than 30 Minutes.* Percolation rates slower than 30 minutes per inch may not be approved except for conventional sand mounds, alternative sand mounds, and innovative and alternative systems.

(f) *Rates Between 2 and 5 Minutes.* A percolation rate of between 2 and 5 minutes per inch after prewetting will require disapproval if the approving authority finds that adequate protection of the ground water may not be provided.

(g) *Distance from Groundwater.* The bottom of the septic drainage system shall be at least 4 feet above ground water. The minimum separation distance may be increased when, in the opinion of the approving authority, additional separation is needed to protect groundwater or where seasonal fluctuations occur.

(h) *Time of year that tests may be conducted for certain soils.* In areas where the soil survey maps or soil borings indicate moderate or severe limitations based on seasonally perched or seasonally high water tables, soil percolation tests and any other tests as may be required shall be performed at the time of the year when the highest water table can be expected at the on-site sewage disposal area, except as follows:

- (1) A repair; or
- (2) When there is evidence that a geological formation has a high and fluctuating water table during specified months of the year, the approving authority may specify the times during which the tests are to be made.

(Ord. No. 81, 2006, § 1)

Sec. 3.810. Capacity of on-site sewage disposal systems, septic tanks, and flow rates.

(a) *Capacity of on-site sewage disposal systems.* The capacity of on-site sewage disposal systems includes all portions of a house except patios, decks, open porches, carports, garages, and uninhabitable attics. 50% of any unfinished

basement having a ceiling height of 7 feet or greater shall be included when computing the square footage of the house.

(b) *Septic tank capacity.*

(1) Minimum septic tank capacity for commercial and institutional establishments shall be calculated with the estimated daily peak sewage flow based on the table contained in section 3.805(E)(ii) of this subtitle or the best available information and the following equation:

(i) Flows of 1,500 gallons per day (gpd) or greater—

$$V = 1,125 \text{ Gallons} + 0.75Q$$

Where:

V = Minimum Septic Tank Volume
 Q = Estimated daily peak sewage flow

(ii) Flows of less than 1,500 gallons per day (gpd)—

$$V = 1.5Q$$

(2) All on-site sewage disposal systems serving a residential use shall be sized in accordance with the following criteria and tables. This table provides for use of automatic clothes washers and other household appliances except food waste grinders.

Liquid Capacity of Septic Tanks (Gallons) for Individual Homes

| Square Footage of House | Required Minimum Tank Capacity (Gallons) |
|-------------------------|--|
| 0 to 1,500 sq. ft. | 1,000 |
| 1,501 to 3,500 | 1,500 |
| 3,501 and up | 2,000 |

(c) *Septic Tank Construction.* Plans for all septic tanks including concrete, plastic, and fiberglass shall be approved by the approving authority prior to installation. Plans shall show all dimensions, reinforcing, structural calculations and such other pertinent data as may be required. Septic tanks shall be watertight and constructed of material to prevent excessive corrosion or de-

cay. Each tank shall be structurally designed to withstand all anticipated earth or other loads and shall be installed level and on a solid bed. All fabricated septic tanks must be constructed in accordance with the plans approved by the approving authority. All septic tanks shall have a liquid depth of not less than 2½ feet and a length of not less than 2 nor greater than 3 times the width. Every septic tank must be a two-compartment tank. The inlet compartment shall have a capacity of not less than two-thirds of the total tank capacity. Cleanout devices and access panels shall be installed in such a manner as to allow both compartments to be properly serviced. Tanks constructed and or assembled in two sections shall be of the top seam construction type. Metal septic tanks shall not be permitted unless authorized by the approving authority.

(d) *Septic Tank Installation Requirements.* The following requirements apply to the installation of septic tanks.

- (1) The inlet and outlet tees shall be located a minimum of 6 inches from the openings of the tank.
- (2) The tees shall extend from near the top of the tank to a point 16 inches below the inverts of the openings.
- (3) Sanitary tees shall conform to the following standards:
 - (i) The inlet tee's vertical leg must be a minimum of 6 inches in diameter and its horizontal leg a minimum of 4 inches in diameter.
 - (ii) The outlet tee's vertical and horizontal legs shall be a minimum of 4 inches in diameter.
 - (iii) The vertical leg of both the inlet and outlet tee must extend 16 inches below the invert of the horizontal leg and not less than 3 inches above the crown of the horizontal leg.
 - (iv) Tees shall be constructed of such 40 or SDR 35 PVC pipe.
- (2) The tops shall have as a minimum, one 20-inch manhole with a handle over each compartment. For septic tanks installed deeper than 6 inches below finished grade, the manhole shall be raised by a method acceptable to the approving authority to within 6 inches below finished grade. Manholes not extended to grade shall have a pipe at ground surface marking the location of the manhole lid. Manholes extending above the ground surface shall be designed in a manner acceptable to the approving authority.
- (3) The minimum thickness of the walls shall be 4 inches, or tanks with wall thicknesses between 3 to 4 inches thick may be used if they are water tightness tested with a method approved by the approving authority.
- (4) The tops and bottoms of concrete tanks shall be 4 inches thick unless placed under a driveway, in which case they shall be a minimum of 6 inches thick.
- (5) All concrete tank walls, tops, and bottoms shall be reinforced in a manner to ensure structural soundness and approved by the approving authority.
- (6) All tanks shall be watertight.
- (7) All pre-cast concrete septic tanks slated for use in howard county shall bear the date on which they were poured. The date shall be permanently scribed in the concrete in such a location as to be conspicuous after the tank has been set in the hole. A tank may not be delivered to Howard County prior to the concrete achieving "working strength" and, in no case, in less than the minimum 7 days curing period. If tanks are made to different specifications for delivery to several counties, those tanks delivered to Howard County shall be marked "Howard County."
- (8) The inlet and outlet of the tank shall be fitted with an approved type gasket, which will ensure the water tightness of the inlet and outlet piping.
- (9) The seam of pre-cast tanks shall be made watertight by the use of an approved sealant.

- (10) The minimum 28 day compressive strength of concrete used to fabricate septic tanks and other sewage disposal components shall be 4000 psi.
- (11) The internal wall shall contain a slot of a minimum height of 2 inches, be located in the center of the liquid depth of the septic tank, and shall extend 4 feet in length.
- (12) The design of the septic system determines the depth of the septic tank. The maximum earth cover on septic tanks shall be 3 feet for concrete tanks and 2 feet for plastic tanks. For installations deeper than as provided above, prior approval must be obtained from the approving authority.
- (4) The minimum capacity of a holding tank system serving a single residential dwelling shall be no less than 3,000 gallons.
- (5) Two or more holding tanks may be connected in series to reach the required storage capacity needed for existing use.
- (6) Holding tanks shall be equipped with a high water level alarm connected to a dedicated circuit that shall provide an audible or visual signal and shall be installed in or on the building structure served by the holding tank system. The floats or other devices for the alarm shall be designed to activate when a minimum holding capacity equivalent to a 24 hour sewage flow is reached.

(e) *Limitation of Service.* A septic tank shall not serve more than one property unless authorized by the approving authority.

(f) *Holding Tanks.* Sewage holding tanks may be used to resolve existing on-site sewage disposal system failures when community sewer facilities are not available and an acceptable on-site repair is not possible. Sewage holding tanks shall meet the criteria set forth in this subsection.

- (1) The applicant shall submit with their application a maintenance contract acceptable to the approving authority that shall include an acceptable pumping schedule between the applicant and a permit holder of a sewage scavenger vehicle permit.
 - (2) Holding tanks shall be of watertight construction and installed in such a manner as to minimize their potential for being impacted by ground or surface water. Where ground and surface waters exist, additional sealing methods for holding tanks, joints, or pipe connections may be required as necessary by the approving authority.
 - (3) Holding tanks shall be sized to accommodate 7 days of sewage flow. Larger holding tank capacities may be required when such use, flow, or additional capacities are needed to maintain sanitary conditions.
 - (7) Each compartment of a holding tank system shall have a manhole constructed to grade to allow access for system maintenance.
 - (8) Any property permanently served by a holding tank shall have a signed "consent agreement for use of holding tanks to correct failing sewage system" that shall be recorded into the land records of howard county as a condition of approval.
- (g) *Abandonment.* When a building that was served by an on-site sewage disposal system is connected to a public sewerage system or otherwise taken out of service, the on-site sewage disposal system shall be properly abandoned by an approved septic system contractor or licensed plumber within 30 days of public sewerage connection or discontinued usage as follows:
- (1) *Tanks and Seepage Pits.* All septic tanks and seepage pits (i.e., drywells) shall be fully pumped out of liquid waste or effluent and then backfilled with clean fill dirt or other approved material. All metal tanks shall be collapsed in place or physically removed prior to backfilling.
 - (2) *Connections.* Unless used in the connection with the public sewerage system hook-up, any connection leading from the building to the abandoned system shall be fully

severed at the building with the resulting opening into the building permanently capped or otherwise sealed.

(Ord. No. 81, 2006, § 1)

Sec. 3.811. Distribution box.

(a) *When Required.* A distribution box may be required when more than one line of subsurface sewage disposal drainfield trench or more than one seepage pit is used. All fabricated distribution boxes shall be constructed in accordance with this section and in accordance with the approved plans as submitted and approved by the approving authority.

(b) *Connection.* Each lateral shall be connected separately to the distribution box and shall not be subdivided.

(c) *Invert level.* The invert of all distribution-box outlets shall be at the same level and approximately 2 inches above the bottom of the box. The inlet invert shall be at least 1 inch above the invert of the outlets. The size of the distribution box shall be sufficient to accommodate the number of lateral lines.

(d) *Watertight.* The distribution box shall be of watertight construction arranged to receive the septic tank effluent sewer and with an outlet or connecting line serving each trench or seepage pit.

(e) *Baffle.* A baffle shall be placed at right angles to the direction of the incoming tank effluent.

(Ord. No. 81, 2006, § 1)

Sec. 3.812. Seepage pit.

(a) *When allowed.* Seepage pits may be used when found necessary and approved by the approving authority for the repair or replacement of existing septic systems:

- (1) To supplement the subsurface disposal field; or
- (2) In lieu of the subsurface disposal field where conditions require the operation of seepage pits.

(b) *Construction of seepage pits.* Seepage pits shall be constructed as follows:

- (1) Where seepage pits are used for septic tank effluent disposal, the number, diameter, and depth of the pits shall be determined after percolation tests have been made to ascertain the porosity of the soil.
- (2) Seepage pits shall be constructed by totally gravel packing the excavated seepage pit in the following manner:

Before addition of aggregate, a 6-inch perforated pipe shall be placed in the excavation and shall extend from the bottom of the pit to just above the completed gravel pack. The pipe shall have 3 rows of perforations located at 120 degrees intervals around the pipe; each row of perforations shall consist of a minimum of 20 five-eighths inch diameter holes for a 10-foot section of pipe. Schedule 40 PVC, SDR-35 PVC, or approved equal and sewer drain pipe (ASTM 2729) are all acceptable for this 6-inch pipe. All sections of pipe are to be primed and glued. Above the gravel a transition to a 4-inch section of SCH 40 pvc, SDR-35 PVC or approved equal pipe shall be made in such a way as to ensure the piping is continuous to the bottom of the dry well. This pipe is to be fitted with a cleanout cap which extends 4 inches above grade. A cast iron pipe and panella type cap shall be used as a sleeve to protect the PVC standpipe in traffic bearing area. The cast iron pipe shall rest on a concrete foundation in a manner approved by the approving authority. A geotextile fabric filter must be placed over the gravel pack to keep the backfill material out of the aggregate, except where poured in-place concrete tops are required to seal the dry well from surface water.

- (3) Seepage pits shall be no closer than 3 times the diameter of the largest pit as measured from side to side.

(Ord. No. 81, 2006, § 1)

Sec. 3.813. Drainfield trenches.

(a) *Design and Construction.* Drainfield trenches shall be designed and constructed on the basis of the required effective percolation area.

(b) *Filter material.* The filter material shall cover the pipe and extend the full width of the trench and shall not be less than 6 inches deep beneath the bottom of the drain pipe, and 2 inches above the top of the pipe. The filter materials shall be washed gravel, crushed stone, or slag, ranging in size from 1/2 to 2 1/2 inches and free of fines, dust, ashes, or clay. The filter material shall be covered by geotextile fabric specially designed to exclude sediment but allow the passage of water.

(c) *Pipe Size and Spacing Requirements.* The minimum size pipe shall be 4 inches and the minimum spacing requirements for disposal fields shall conform to those set forth in the following table:

Size and Spacing of Drainfield Fields

| <i>Width of Trench at Bottom (In.)</i> | <i>Spacing Between Trenches (ft.)*</i> | <i>Effective Absorption Area per Lineal ft. of Trench (sq. ft.)</i> |
|--|--|---|
| 24 | 6.0 | 2.0 |
| 36 | 9.0 | 3.0 |

*A greater spacing is desirable where available area permits.

(d) *Length of Laterals.* The maximum length of a lateral shall not exceed 100 feet. Laterals shall be designed of equal length unless equal distribution is accomplished by low pressure dosing.

(e) *Disposal Lines.* Disposal lines shall be constructed of not less than 4-inch perforated plastic pipe of a type approved by the approving authority. The perforated pipe shall contain 3 rows of perforations. Each row of perforations shall consist of a minimum of 20 five-eighths-inch diameter holes for a 10-foot section of pipe.

(f) *Drainfield Trench.* The trench bottom shall be uniformly graded to slope no more than 4 inches per 100 feet. The drainfield pipe shall be laid at the same pitch as the bottom of the drainfield trench.

(g) *Drainfield Trench Excavations.* Drainfield trench excavations shall be inspected before the addition of aggregate unless an alternative arrangement has been made with the approving authority.

(h) *Inspection Pipe.* An inspection pipe shall be installed at the distal end of each lateral of a drainfield absorption system. The pipes shall be perforated in the aggregate, solid above the aggregate, and shall extend from the bottom of the trench to above finished grade. An approved cleanout cap shall be placed on top of the pipe. Both SDR 35 and SCH 40 PVC are approved for the inspection pipe.

(i) *Deep Trenches.* In cases where state regulations would allow the use of deep absorption trenches, credit may be given for the added absorption area provided in deeper trenches with a resultant decrease in length of trenches. Such credit shall be given in accordance with the following table, which gives the percentage of length of standard absorption trenches based on 6 inch increments of increase in depth of filter material:

Percentage of Length of Standard Trench

| <i>Effective Depth of Gravel Below Pipe in Inches</i> | <i>Trench Width</i> | | | |
|---|---------------------|---------------|---------------|---------------|
| | <i>12 In.</i> | <i>18 In.</i> | <i>24 In.</i> | <i>36 In.</i> |
| 12 | 75 | 78 | 80 | 83 |
| 18 | 60 | 64 | 66 | 71 |
| 24 | 50 | 54 | 57 | 62 |
| 30 | 43 | 47 | 50 | 55 |
| 36 | 37 | 41 | 44 | 50 |
| 42 | 33 | 37 | 40 | 45 |

- (1) The standard absorption trench is one in which the filter material extends 2 inches above the 6 inches below the pipe.
- (2) For trenches or beds having width or depth not shown in the above table, the percent of length of standard absorption trench may be computed as follows:

Percent of length of standard trench =

$$\frac{W + 2}{W + 1 + 2D} \times 100$$

Where W = Width of trench in feet
 D = Effective depth of gravel below pipe in feet

- (3) The separation between deep trenches shall be computed by using the following formula. The minimum separation between trenches shall be 6 feet.

Separation between trenches = 2X effective depth in trench + width of trench. In no case shall the required trench separation exceed 18 feet edge to edge.

(Ord. No. 81, 2006, § 1)

Sec. 3.814. Grease interceptors.

(a) *Design and Construction.* The following requirements apply to the design and construction of grease interceptors.

- (1) Grease interceptors shall be required for all buildings where food preparation, food processing, or waste from food operations occur except non-commercial single family residential buildings.

- (2) Where required, a grease interceptor shall be placed in an accessible location outside the building. It shall be located on the kitchen waste drain as close as possible to the kitchen. The discharge from a grease interceptor shall pass through a septic tank before it is discharged to the underground disposal system or other treatment facilities.

- (3) All fabricated grease interceptors shall be constructed in accordance with the plans approved by the approving authority. Interior grease recovery units and metal grease interceptors are not permitted for use.

- (4) A grease interceptor shall provide at least 5 gallons per individual seating unit and shall not be less than 500 gallon capacity. It shall be baffled to retain congealed grease on the surface of the liquid. The inlet pipe shall be baffled to a depth of 6 inches below the liquid level and the outlet shall be baffled to a depth 6 inches from the bottom of the grease interceptor.

(b) *Other Designs.* Grease interceptor designs other than above may be used upon approval of the approving authority.
 (Ord. No. 81, 2006, § 1)

Sec. 3.815. Piping material.

All piping from the building drain to the distribution box shall be 4 inches or larger SDR-35 PVC, or SCH 40 DWV PVC pipe, or approved equal.

(Ord. No. 81, 2006, § 1)

Sec. 3.816. Mounds and non-conventional systems.

Non-conventional systems where allowed, shall be installed according to plans submitted to and approved by the approving authority. Where mound systems are proposed, infiltrometer tests shall be conducted in the least permeable soil horizon, that is located in the upper 24 inches of soil. A mound system shall not be approved where the ground water is less than 24 inches below the ground surface. Mound systems shall be installed according to plans approved by the approving authority. Mound system design shall meet, at a minimum, the requirements of COMAR or COMAR's corresponding design manual, whichever is the most current.

(Ord. No. 81, 2006, § 1)

Sec. 3.817. Sewage effluent pumping equipment for on-site sewage disposal systems.

(a) *Pump and Pit.* Where necessary to lift the septic tank effluent to the disposal area, an approved pump and pump pit shall be provided.

(b) *Pit Design.* The pit shall be specifically designed for sewage effluent and shall be of sufficient capacity to accommodate the particular application. The pump pit shall be located after the septic tank and only septic tank effluent shall enter the pump pit unless otherwise authorized by the approving authority.

(c) *Sump.* The sump containing the pump shall be watertight, accessible from grade with a 20-inch minimum manhole, and structurally sufficient for the existing or proposed use. Concrete components shall have their only construction seam located above the inlet to the sump.

(d) *Alarm.* An audible or visual high water alarm shall be installed in the building per manufacturer's specifications. The high water alarm shall be on a separate electrical circuit from the pump.

(e) *Minimum Emergency Capacity.* Unless otherwise specified by the approving authority, a minimum emergency capacity equal to the design flow shall be provided, the capacity to be mea-

sured between the invert of the inlet to the pit and the elevation at which the high water alarm is activated.

(f) *Force Main Pipe.* The force main pipe between the pump and point of discharge shall be SCH 40 or SDR 21 PVC or approved equal. All SCH 40 and SDR 21 fittings in this line shall be pressure rated. Force mains shall be installed so as to prevent freezing and no shallower than 36 inches below grade.

(g) *Electrical Connections.* All electrical connections to the pump and float switches shall be located outside the pump chamber and protected from the weather.

(h) *Pump Pits Serving Nonresidential Uses.* All pump pits serving nonresidential uses must have duplex pumping equipment.

(Ord. No. 81, 2006, § 1)

Sec. 3.818. Chemical toilets.

A chemical toilet shall not be erected or placed for use without prior approval from the approving authority.

(Ord. No. 81, 2006, § 1)

Sec. 3.819. Privies and privy pits.

(a) *Approval Required.* Prior to construction or installation, privies must be approved by the approving authority.

(b) *Construction Requirements.* Where approved, privies shall be constructed as follows:

- (1) A privy and privy pit shall be:
 - (i) Located and constructed to prevent the contamination of ground and surface water;
 - (ii) Constructed in such a manner as to be insect free and to prevent odor nuisances.
- (2) A privy pit shall provide a watertight structure in the pit.
- (3) A privy building shall be placed over the pit and shall be constructed as follows:
 - (i) The floor of a privy building shall be of wood or concrete with the privy seat of plastic or wood.

- (ii) A vent located adjacent to the seat shall extend from the pit to a point above the roof of the building.
 - (iii) The seat shall be provided with a cover that shall be self-closing.
 - (iv) All openings shall be screened to prevent the entrance of flies.
 - (v) Earth shall be mounded on all sides of the building to prevent the entrance of rats to the pit.
- (4) When removable cans are used in a privy, they shall be placed in watertight vaults and provision made for removing the seat so the cans can be moved for disposal of the contents in a manner acceptable to the approving authority.

(Ord. No. 81, 2006, § 1)

Sec. 3.820. Water service near sources of pollution.

(a) *Pressure Water Supply Lines.* All pressure water supply lines shall be at least 10 feet removed from any sewage disposal area or any area designated for future sewage disposal. All pressure water supply lines shall also maintain a minimum of 10 feet separation from all septic tanks, distribution boxes, cesspools, or other potential sources of contamination.

(b) *Where a Building Sewer Line is Crossed.* Where any pressure water supply line must cross the building sewer line, the bottom of the water service line within 10 feet of the crossing shall be at least twelve inches above the top of the building sewer line. Where this condition cannot be met, a sleeve shall be installed over the water pipe, extending a minimum of 10 feet on either side of the sewer pipe. The sleeve shall be made watertight by use of a non-hardening seal. The sleeving material shall be at least the same grade or schedule of material as the water pipe it is sleeving.

(Ord. No. 81, 2006, § 1)

Sec. 3.821. Administration and enforcement.

(a) *Stop Work Order.* For any provision of this subtitle that is more strict than comar requirements, the approving authority may issue a stop

work order in accordance with section 114 of the Howard County Building Code as adopted in Subtitle 1 of this title.

(b) *Right of Entry.*

(1) *Inspections.* The approving authority shall have a right of entry at reasonable times for the purpose of performing an inspection in accordance with the provisions of this subtitle.

(2) *Emergency Right of Entry.* In addition to an inspection authorized by this section, the approving authority shall have the right to enter a building, structure, or premises where there is evidence that an actual or potential emergency exists that threatens or may threaten the public health and safety for the purpose of performing duties pursuant to this subtitle or to enforce the provisions of this subtitle. The approving authority or their authorized representative shall produce appropriate proof of identity prior to entry.

(c) *Violations.*

(1) *Unlawful Acts.* A person shall not perform any work, or cause the same to be performed, in conflict with or in violation of any provision of this subtitle.

(2) *Nuisance.* A violation of this subtitle is a nuisance as defined in section 12.110 of the Howard County Code. In addition to the authority set forth in this section, the approving authority may take action in accordance with section 12.110 of the Howard County Code to abate a violation of this subtitle.

(3) *Notice of Violation.* The approving authority may serve a notice of violation on a person performing work that is regulated by this subtitle. A notice shall direct that the illegal action or condition be discontinued, shall direct the abatement of the violation, and shall set a reasonable time for abatement.

(4) *Prosecution of Violation.* For any provision of this subtitle that is more strict than COMAR requirements, if the notice

of violation is not complied with within the time set forth in the notice, the approving authority may request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct, or abate the violation, to require the removal or termination of the violation, and to criminally prosecute the permit holder.

(5) *Penalties.*

(i) *Criminal Penalties.* A person, firm or corporation, or other entity which individually, collectively, or through others, constructs, erects, alters, or repairs any work in violation of any provision of this subtitle is guilty of a misdemeanor and, upon conviction, is subject to a fine, not exceeding \$1,000, or imprisonment, not exceeding 30 days, or both.

(ii) *Civil Penalties.* Alternatively, and in addition to and concurrent with all other remedies at law or in equity, the approving authority may enforce the provisions of this subtitle with civil penalties, as provided in Title 24, "Civil Penalties," of the Howard County Code, as follows:

- a. For any vehicle found to be operating in Howard County without a current valid sewage scavenger permit as required by section 3.804 of this subtitle, a first violation is a Class E offense and a subsequent violation is a Class C offense;
- b. A first violation of any other provision of this subtitle is a Class C offense and a subsequent violation is a class a offense; and
- c. Each day that a violation continues is a separate offense.

(d) *Appeals.* Any person aggrieved by a decision relating to a permit that is based on a provision of this subtitle that is more strict than a

COMAR requirement may appeal to Board of Health in accordance with the provisions of 12.110(f) of this Code.

(Ord. No. 81, 2006, § 1)

Sec. 3.822. COMAR regulations.

This subtitle shall not be construed to repeal or affect any powers of the State of Maryland State Department of the Environment under the provisions of the health-environment article of the Annotated Code of Maryland or COMAR.

(Ord. No. 81, 2006, § 1)

Sec. 3.823. Severability.

If any part of this subtitle is held invalid, the invalidity shall not affect the other parts.

(Ord. No. 81, 2006, § 1)

SUBTITLE 9. INDIVIDUAL POTABLE WATER SUPPLY SYSTEMS.

Sec. 3.900. Definitions.

Terms used in this subtitle have the meanings indicated.

(a) *Approving Authority.* The Health Officer for Howard County or the Health Officer's designee.

(b) *Individual Potable Water Supply System.* A single system of pipes, pumps, and tanks using a system of ground water to supply only a single lot. An individual potable water supply system does not include a public community or non-transient, non-community water supply.

(Ord. No. 81, 2006, § 1)

Sec. 3.901. General regulations.

(a) *Application.* The regulations in this subtitle apply to any individual potable water system where plumbing fixtures are installed for human occupancy.

(b) *Authority of the Approving Authority.* The approving authority shall administer, enforce, and interpret the provisions of this subtitle. The approving authority may adopt minimum standards

for individual potable water supply and distribution systems in the implementation of this subtitle.

(c) *Pumps.* Pumps shall be installed only in wells in accordance with comar requirements and in springs and cisterns.

(d) *Permits to Install Pumps.* Only registered master plumbers, certified well drillers, or certified pump installers may apply for permits to install pumps.

(e) *Prohibited Systems.* When the approving authority finds there to be insufficient lot area or yield for an adequate individual potable water supply system for the building or land use proposed, a building permit shall not be issued and an individual potable water supply system shall not be permitted. An individual potable water supply system serving existing structures for which an addition, alteration, or change in use is proposed, shall be determined by the approving authority as capable of handling existing and foreseeable increases in water demand. A susceptibility analysis to existing or potential sources of contamination and additional water quality tests may be required at the discretion of the approving authority.

(f) *Site plans required.* Before a building permit is issued, a site plan shall be submitted to the approving authority that shall contain the following:

- (1) Detailed plans showing the location of the proposed structure to be served by the individual potable water supply system, and any existing or proposed structure within 30 feet of the property line.
- (2) Location of all existing and proposed wells and water lines on the property and within 100 feet of the property line.
- (3) Location of all existing and proposed septic systems, septic system reserve areas, building sewer lines, and public sewer facilities on the property and within 100 feet of the property line.

- (4) A minimum separation of 30 feet shall be maintained between a proposed structure and an existing water supply well.

(Ord. No. 81, 2006, § 1)

Sec. 3.902. Pumps.

(a) *Pumps.* Pumps shall be:

- (1) Certified under Water Systems Council testing and rating standards;
- (2) Installed in accordance with the manufacturer's recommendations;
- (3) Located to facilitate necessary maintenance and repair, including overhead clearance for removal of drop pipe and other accessories; and
- (4) Suitably mounted to avoid objectionable vibration and noise, and to prevent damage to pumping equipment.

(b) *Pumping Equipment.* Pumping equipment shall be installed to prevent the entrance of contamination or objectionable material either into the well or into the water that is being pumped.

(c) *Pump Controls.* The pump controls and accessories shall be protected from the weather. (Ord. No. 81, 2006, § 1)

Sec. 3.903. Controls—Devices.

The following controls are required on all pump installations:

- (a) Pressure switch;
- (b) Thermal overload switch;
- (c) Pressure relief valve on positive displacement pumps; and
- (d) Low water level cut-off switch is required on all pumps that have a capacity in excess of the source of water.

(Ord. No. 81, 2006, § 1)

Sec. 3.904. Pump housing.

Except a separate structure housing pumping equipment, a water supply shall not be located within or under any building. When a separate structure is used to house the water supply, the

pumping equipment shall have an impervious floor and rain tight walls and roof. Where a pump pit is used, it shall be of watertight construction and provided with a positive drain or sump pump to keep the pit dry.

(Ord. No. 81, 2006, § 1)

Sec. 3.905. Storage equipment.

(a) *Storage Equipment Generally.* Storage equipment shall be as follows:

- (1) All tanks shall be certified under water systems council standards for size and pressure;
- (2) All tanks shall be coated or made of material to resist corrosion;
- (3) Hydropneumatic tanks shall have a working pressure rating in excess of the maximum system pressure, but not less than 75 psi;
- (4) All tanks shall be constructed of materials and coatings that are non-toxic; and
- (5) All tanks shall be provided with a means of draining.

(b) *Atmospheric Storage Tanks.* Atmospheric storage tanks shall be provided with a cover as required in section 10.8.4. of the Howard County Plumbing Code.

(Ord. No. 81, 2006, § 1)

Sec. 3.906. Cross connection prohibited.

There shall not be cross-connection between an individual water supply system and other individual or public water supply systems.

(Ord. No. 81, 2006, § 1)

Sec. 3.907. Separate service for each property.

An individual potable water supply system shall not serve more than one property or structure unless authorized by the approving authority.

(Ord. No. 81, 2006, § 1)

Sec. 3.908. Connection to public water system required.

(a) *Public Water Connection.* Except for property located outside the planned service area for water service and the metropolitan district, wherever a water main for public use exists in any street or alley and directly abuts the property, the owner of all buildings constructed for human habitation, occupancy, or use shall connect to the public water main.

(b) *Wells prohibited.* A well for potable use shall not be constructed on a property accessible to an adequate public water supply.

(Ord. No. 81, 2006, § 1)

Sec. 3.909. Responsibility to abandon wells.

Wherever a replacement well is installed and the original well is abandoned, it is the owner's responsibility to abandon and seal a previously existing water supply in a manner satisfactory to the approving authority.

(Ord. No. 81, 2006, § 1)

Sec. 3.910. Potability requirements.

Any well intended to serve a building for human use or habitation shall meet the potability requirements of COMAR 26.04.04 and 26.04.01 prior to occupancy.

(Ord. No. 81, 2006, § 1)

Sec. 3.911. Administration and enforcement.

This subtitle shall be administered and enforced by the approving authority in accordance with the requirements of section 3.821 of the Howard County Code.

(Ord. No. 81, 2006, § 1)

Sec. 3.912. Waiver.

The approving authority may grant a waiver of a provision of this subtitle that is more stringent than the standards set forth in comar for unusual circumstances or extraordinary hardships where the approving authority believes that the modification is in compliance with the intent and purpose of this subtitle and that the modification

does not lessen the health or environmental requirements of this subtitle and the requirements of COMAR 26.04.02.

(Ord. No. 81, 2006, § 1)

Sec. 3.913. Severability.

If any part of this subtitle is held invalid, the invalidity shall not affect the other parts.

(Ord. No. 81, 2006, § 1)