

DRAFT DATED 4/15/2003

DRAFT MODEL ORDINANCE FOR GRAY WATER REUSE
ATHENS-CLARKE COUNTY, GEORGIA

AN ORDINANCE AMENDING TITLE 5. UTILITIES, CHAPTER 5.1 CODE OF ORDINANCES COUNTY OF ATHENS-CLARKE, GEORGIA ENTITLED "SEWER USE" BY AMENDING SECTION 5.1.1(58) RELATING TO GENERAL PROVISIONS AND THE DEFINITION OF SEWAGE, SECTION 5.1.2 (a) (2) RELATING TO DISCHARGE TO NATURAL OUTLETS UNDER GENERAL SEWER USE REQUIREMENTS (USE OF PUBLIC SEWERS REQUIRED), SECTION 5.1.2 (b) (1) RELATING TO PROVISIONS FOR PRIVATE SYSTEM UNDER GENERAL SEWER USE REQUIREMENTS (PRIVATE WASTEWATER DISPOSAL SYSTEMS), SECTION 5.1.2 (b) (2) RELATING TO PERMIT AND FEES UNDER GENERAL SEWER USE REQUIREMENTS (PRIVATE WASTEWATER DISPOSAL SYSTEMS), SECTION 5.1.2 (b) (4) RELATING TO DESIGN SPECIFICATIONS UNDER GENERAL SEWER USE REQUIREMENTS (PRIVATE WASTEWATER DISPOSAL SYSTEMS) AND SECTION 5.1.2 (c) (1-18) RELATING TO PROHIBITED DISCHARGE STANDARDS (PRIVATE WASTEWATER DISPOSAL SYSTEMS).

BE IT ORDAINED BY THE COUNTY OF ATHENS-CLARKE, GEORGIA THAT CHAPTER 5-1, SECTIONS 5.1.1 AND 5.1.2 BE AMENDED AS FOLLOWS:

5.1.1. General Provisions.

(58) Sewage: Human excrement and black water.

(a) Blackwater: Wastewater generated from toilets, kitchen sinks, and garbage disposals.

(59) Gray Water: Wastewater generated from showers, bathroom sinks, washing machines, and dishwashers that can be treated and reused for nonpotable purposes, especially landscape irrigation.

(a) Characteristics of gray water: bacteria, bleach, foam, hot water, nitrates, oil and grease, salinity, soaps, sodium, suspended solids, high pH, hair, food particles, and organic matter.

5.1.2. General Sewer Use Requirements.

(a) Use of public sewers required:

(1) Disposal of human and animal waste required. It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within Athens-Clarke County, or in any area under the

jurisdiction of Athens-Clarke County, any human or animal excrement, garbage, or objectionable waste.

- (2) Discharge to natural outlets. It shall be unlawful to discharge to any natural outlet within Athens-Clarke County, or in any area under the jurisdiction of Athens-Clarke County, any wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter.

(i) It shall be lawful to discharge treated gray water on individual residential property by the homeowner, for use in landscape irrigation.

- (3) Privy, septic tank, cesspool or other facilities. Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of wastewater.
- (4) Toilet facilities and connection to public sewer required. The owner(s) of all houses, buildings or properties used for human and/or animal occupancy, employment, recreation or other purposes, situated within Athens-Clark County and abutting any street, alley or right-of-way in which there is now located, or may in the future be located, a public sanitary sewer of said Athens-Clarke County is hereby required at the owner's expense, to install suitable toilet facilities therein and to connect such facilities directly with the proper public sewer in accordance with the provisions of this chapter within 30 days after the date of official notice to do so; provided the public sewer is within 200 feet of the property line.
- (5) Force main connections. It shall be unlawful for any person, without the consent of the mayor and commission, to connect to the Athens-Clarke County sanitary sewage system by means of any force main from a pumping facility or apparatus. If any person should desire to connect a force sanitary sewer main with the sewage system of Athens-Clarke County, such person shall make written application to the mayor and commission. Such application shall be accompanied by detailed plans and specifications of such proposal, together with such other pertinent information as may be required by the Athens-Clarke County Public Utilities Department. The mayor and commission shall proceed to act on such application and shall take into consideration whether or not such would impose a burden on Athens-Clarke County, and in this connection shall consider the useful life of the plumbing facility, the replacement cost thereof, power costs, inflationary trends and any other costs or expense factors in connection therewith. After considering such factors, the mayor and commission may require the deposit of a sum of money with Athens-Clarke County by the applicant to compensate Athens-Clarke County for the burden thereof. The mayor and commission may require the conveyance of such pumping facility, together with all appurtenances connected therewith, to Athens-Clarke County, together with such certificates of title or evidence of ownership as might be

required by Athens-Clarke County. It is the intent of this provision that such pumping facility should not become a burden to Athens-Clarke County in operating and maintaining the same. The mayor and commission shall then deny or grant such request. One-family residences and duplexes containing two-family units are exempted from the provisions of this section; except, that a permit shall be obtained by the owner thereof from the Athens-Clarke County Building Inspection Department prior to installing a sewage pumping device to any sanitary line which connects with the sanitary sewage system of Athens-Clarke County. The plans and design of any such device shall be approved by the Athens-Clarke County Building Inspection Department prior to installation. Any person who shall violate the provisions of this section may, after notice and hearing before administrative hearing officer, have his sewer and other Athens-Clarke County utility services discontinued, in the discretion of the Administrative Hearing officer.

(b) Private wastewater disposal systems:

- (1) Provisions for private system. Where a public sanitary sewer is not available under the provisions of section 5.1.2 (a) (4), building sewers shall be connected to private wastewater disposal systems complying with the provisions of this section. A private wastewater disposal system shall be a wastewater disposal system requiring an absorption field, unless otherwise stated. **A private wastewater disposal system may include a gray water system.**
- (2) Permit and fees. Before commencement of construction of a private wastewater disposal system the owner(s) shall first obtain a written permit signed by the plumbing inspector. The application for such permit shall be made on a form furnished by the Athens-Clarke County Building Inspection Department, which the applicant shall supplement by any plans, specifications, and other information as are deemed necessary by the plumbing inspector. Permit fees as required by the Athens-Clarke County Plumbing Code shall be paid to Athens-Clarke County at the time the application is filed.

Permits for gray water reuse in private residences. For private residence systems with a flow of less than 400 gallons per day, a homeowner who meets the conditions described in subsection (a) is covered under a General Permit for Gray Water Reuse and does not need to apply for anything. For private residence systems with a flow greater than 400 gallons per day but less than 3,000 gallons per day, a homeowner must apply for and obtain a Standard Permit for Gray Water Reuse.

(a) Requirements for a General Permit:

- (1) Human contact with gray water and soil irrigated by gray water is avoided;**

- (2) Gray water originating from the residence is used and contained within the property boundary for household gardening, composting, lawn watering, or landscape irrigation;**
- (3) Surface application of gray water is not used for irrigation of food plants;**
- (4) The gray water does not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, or disposing of waste solutions from home photo labs or similar activities;**
- (5) Application of gray water is managed to minimize standing water on the surface;**
- (6) The gray water system is constructed so that if blockage, plugging, or backup of the system occurs, gray water can be directed into the sewage collection system or on-site wastewater treatment and disposal system, as applicable. The gray water system may include a means of filtration to reduce plugging and extend system lifetime;**
- (7) Gray water storage tanks are covered to restrict access and eliminate mosquito habitat;**
- (8) The system is not in a floodway;**
- (9) The system is operated to maintain a vertical separation distance of at least five feet from the point of gray water application to the top of the seasonally high groundwater table;**
- (10) The gray water system does not change the design, capacity, or reserve area requirements for an on-site wastewater treatment facility for blackwater treatment and disposal, and ensures that the facility can handle blackwater and gray water flow combined if the gray water system fails or is not fully used;**
- (11) Any pressure piping used in a gray water system that may have potential for cross connection with a potable water system indicates that the piping does not carry potable water;**
- (12) Gray water applied by surface irrigation does not contain water used to wash diapers or other soiled or infectious garments unless the gray water is disinfected before irrigation; and**
- (13) Surface irrigation by gray water is only by flood drip or drip irrigation.**

(b) Application Process for a Standard Permit. A person shall file a Notice of Intent to operate a gray water irrigation system with the Athens-Clarke County Public Utilities Department at least 90 days before the start date of the proposed activity. The Notice of Intent shall include:

- (1) Applicant's name, address and telephone number;**
- (2) Social security number of the applicant, if the applicant is an individual;**

(3) A legal description of the direct reuse site, including latitude and longitude coordinates;

(4) The design plans for the gray water irrigation system, which must comply with all recommendations of the Clarke County Health Department Sanitarian.

(5) A signature on the Notice of Intent certifying that the applicant agrees to comply with the requirements of this Article and the terms of this Standard Permit, and

(6) The applicable permit fee as required by the Athens-Clarke County Plumbing Code, which shall be paid to Athens-Clarke County at the time the application is filed.

(c) Prohibitions. The following are prohibited regarding gray water reuse:

(1) Gray water use for purposes other than irrigation, and

(2) Spray irrigation.

- (3) Inspection of construction. A permit for a private wastewater disposal system shall not become effective until the installation is completed to the satisfaction of the plumbing inspector. The plumbing inspector shall be allowed to inspect the work at any stage of construction, and, in any event, the applicant for the permit shall notify the plumbing inspector when the work is ready for final inspection, and before any underground portions are covered. The inspections shall be made in a reasonable length of time by the plumbing inspector.
- (4) Design specifications. The type, capacities, location and layout of a private wastewater disposal system, **including a private gray water reuse system**, shall comply with all recommendations of the Clarke County Health Department Sanitarian. No permit shall be issued for any private wastewater disposal systems employing subsurface soil disposal where the lot area is less than the minimum requirements specified by the Clarke County Health Department Sanitarian. No septic tank or cesspool shall be permitted to discharge to any natural outlets.
- (5) Connecting existing system to public sewer. At such time as a public sewer becomes available to a property served by a public sewer becomes available to a property served by a private wastewater disposal system, as provided in section 5.1.2 (a) (4), a direct connection shall be made to the public sewer within 30 days in compliance with this chapter; provided, that a person shall be entitled to continue to utilize any private wastewater disposal system which may be in use at the time the public sewer becomes available within 200 feet of the property line for so long as such system functions properly for the treatment of wastewater as determined by the public utilities director.
- (6) Operation and maintenance. The owner(s) shall operate and maintain the private wastewater disposal facilities in a sanitary manner at all times in accordance with the conditions of the operating permit, at no expense to Athens-Clarke County. All

sludges and byproducts of private wastewater facilities shall be disposed of as provided by section 5.1.3 (e) of this chapter. Such facilities shall be subject to inspection by the Clarke County Sanitarian at reasonable times.

- (7) Requirements of other authorities. No requirement contained in this Article shall be construed to relieve the applicant of any additional requirements that may be imposed by other authorities having legal jurisdiction.
- (c) Prohibited discharge standards. No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other National, state or local pretreatment standards or requirement. Furthermore, no user may contribute the following substances to the POTW:
- (1) Pollutants which create a fire or explosive hazard in the municipal wastewater collection and POTW, including, but not limited to wastestreams with a closed-cub flashpoint of less than 140 degrees fahrenheit (60 degrees centigrade) using the test methods specified in 40 CRF 261.21.
 - (2) Any wastewater having a pH less than 5.5 or more than 10.0, or otherwise causing corrosive structural damage to the POTW or equipment, or endangering Athens-Clarke County Personnel.
 - (3) Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference, but in no case solids greater than one and one-half (1/2) inches in any dimension.
 - (4) Any wastewater containing pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with either the POTW; or any wastewater treatment or sludge process, or which will constitute a hazard to humans or animals.
 - (5) Any wastewater having a temperature greater than 150 degrees Fahrenheit, or which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104 degrees fahrenheit.
 - (6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in excess of 100 mg/l.
 - (7) Any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

- (8) Any trucked or hauled pollutants, except at discharge points designated by Athens-Clarke County in accordance with section 5.1.3 (e).
- (9) Any noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance, a hazard to life, or to prevent entry into the sewers for maintenance and repair.
- (10) Any wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent thereby violating Athens-Clarke County's NPDES permit. Color (in combination with turbidity) shall not cause the treatment plant effluent to reduce the depth of the compensation point for photosynthetic activity by more than ten percent from the seasonably established norm for aquatic life.
- (11) Any wastewater containing any radioactive wastes or isotopes except as specifically approved by the public utilities director in compliance with applicable state or federal regulations.
- (12) Stormwater, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted industrial wastewater, unless specifically authorized by the public utilities director.
- (13) Any sludges, screenings, or other residues from the pretreatment of industrial wastes.
- (14) Any medical wastes, except as specifically authorized by the public utilities director in a wastewater discharge permit.
- (15) Any wastewater causing the treatment plant's effluent to fail a toxicity test.
- (16) Any wastes containing detergents, surface-active agents, or other substances that may cause excessive foaming in the POTW.
- (17) Any discharge of fats, oils, or greases of animal or vegetable origin is limited to 200 mg/l.
- (18) Any garbage that has not been properly shredded; however, the installation and operation of any garbage grinder equipped with a motor of one-half (1/2) horsepower (seventy-six one hundredths metric horsepower) or greater, dimension or greater to be discharged to the sewer system shall be subject to the review and approval of Athens-Clarke County. Discharge of ground paper products to the sewer system is prohibited.

Wastes prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW. All floor drains located in process or materials storage areas must discharge to the industrial user's pretreatment facility before connecting with the POTW. **Since gray water reuse is limited to individual private residences, it will not affect prohibited discharge standards for POTWs.**