

**Louisiana Administrative Code**  
**Title 51**  
**Part XIII. Sewage Disposal**

**Regulations Regarding Mechanical or Aerobic Wastewater Treatment System  
Installations with Spray Irrigation Effluent Reduction  
For Individual Residential Installations**

**Chapter 3. General Requirements for Sewerage Disposal**

**§303. Responsible Parties**  
**[formerly paragraph 13:003]**

- A. A person who owns, operates, manages, or otherwise controls any premises, shall provide for sewage disposal in a manner which is in compliance with this Code.

**§305. Discharges**  
**[formerly paragraph 13:004-1]**

- A. A person shall not directly or indirectly discharge, or allow to be discharged, the contents or effluent from any plumbing fixtures, vault, privy, portable toilet, or septic tank, into any road, street, gutter, ditch, water course, body of water, or onto the surface of the ground.

**Chapter 7. Individual Sewerage Systems**  
**[formerly Chapter 13 Subpart D]**

**Subchapter A. General Requirements**

**§703. Plans**  
**[formerly paragraph 13:013-1]**

- A. The review and approval of plans and specifications for the proposed individual sewerage system shall be made in accordance with the "Regulations Controlling the Design and Construction of Individual Sewage Systems" (See Chapter 7, Subchapter B).

**Subchapter B. Design and Construction Regulations**

- A. Mechanical wastewater treatment plants are small plants capable of providing primary and secondary treatment of sanitary sewage. All are considered to be aerobic treatment units.
- B. An individual mechanical plant will be permitted where individual sewerage systems would currently be permitted under prevailing rules as set forth in this Part of the state sanitary code. Sewage loading criteria for determining the average daily design flow and organic loading are contained in Chapter 15 of this Part.
- C. An individual mechanical plant will be permitted in lieu of a conventional septic tank system (septic tank/absorption field) only in accordance with the provisions of §511.B of this Code, and where a conventional septic tank system could not be permitted.
- D. Permitted individual mechanical plants shall strictly comply with National Sanitation Foundation International Standard, NSF 40-1996 for Residential Wastewater Treatment Systems (Class I Systems) as revised May 1996 and published by NSF International, P.O. Box 130140, Ann

Arbor, Michigan 48113-0140 USA, and as has been approved by the American National Standards Institute, 11 West 42nd Street, New York, New York 10036 as standard ANSI/NSF 40-1996, revised May 28, 1996.

- E. All individual mechanical plants currently approved for installation in Louisiana as of the effective date of these regulations shall not be required to meet the requirements of §725.D until March 1, 2001. Until March 1, 2001, plants shall continue to comply with the standards under which they were approved. Effective March 1, 2001, all plants shall comply with the standard as stated in §725.D.
- F. In addition to evidence of strict compliance with NSF International Standard NSF 40-1996 (Class I Systems), and ANSI/NSF 40-1996 (Class I Systems), as are specified in §725.D of this Code, the following Department of Health and Hospitals/Office of Public Health (DHH/OPH) requirements shall also apply.

(d). It shall be required that manufacturers/sub-manufacturers/installers, as appropriate must provide a minimum two-year service policy to the purchaser of each individual mechanical (residential) plant purchased/ installed at no additional cost, with verification provided to DHH/OPH and the purchaser, of such service policy provision. The initial policy shall contain provisions for four inspection/service visits (scheduled once every six months over the two-year period) during which electrical, mechanical, and other applicable components are inspected, adjusted, and serviced. The initial service policy shall also contain provisions for an effluent quality inspection consisting of a visual assessment of color, turbidity, and scum overflow, and an olfactory assessment for odor.

**§731. Effluent Reduction System Requirements for Treated Wastewater**

- A. Disinfectants. Where effluent discharges are required to be disinfected, and chlorine is used as the disinfectant, a chlorine contact chamber is required. Calcium hypochlorite, labeled for wastewater disinfection, shall be added in sufficient concentrations to maintain a minimum residual of 0.5 ppm total chlorine in the effluent. In order to achieve the required chlorine contact time, a baffled chlorine contact chamber [§1501.B.11 (Figures 11, 12, 13)] designed to meet the needs for each system with the specified liquid holding capacity shall be used as follows.

<b>Disinfectant Chamber Minimum Liquid Capacity</b>	
<b>Treatment Capacity of Sewerage System</b>	<b>Contact Chamber Liquid Capacity</b>
500 GPD or less	30 gallons
501-750 GPD	45 gallons
751-1000 GPD	60 gallons
1001-1500 GPD	90 gallons

- 1. Any other disinfectant proposed for use should provide an equivalent level of disinfection.
- B. Pumping Stations. Pumping station, when required, must be constructed of approved materials, and must comply with the applicable provisions of this Code.
- C. Effluent Reduction Systems. Individual sewage systems, with a capacity up to and including 1500 gpd, that produce a treated, off-site effluent, shall include an effluent reducer as part of the overall system [§1501.B.12 (Figure 14)].
- D. Special situations may arise where an individual on-site wastewater treatment system is allowed as per §511.B of this Code, but it is physically impossible to install the required size of the

effluent reduction system or the effluent reduction system itself due to lot size or when a limited use sewerage system is installed in a marsh/swamp area or located over water. The size of the effluent reduction system can be reduced to the maximum amount the lot can accommodate or the installation waived with the authorization of the sanitarian parish manager. Written notification of such authorization must be submitted to the sanitarian regional director and a copy attached to the "Application for Permit for Installation of On-Site Wastewater Disposal System".

- E. All effluent reduction systems shall be installed by a licensed installer. Existing field lines can not be used as the effluent reduction system.
- F. The size of the effluent reduction system installed has to correspond with the recommended size of the sewerage system. For example if a 750 GPD plant is required on the "Application For Permit For Installation of On-Site Wastewater Disposal System", the applicant may install a 1000 GPD plant, however the size of the effluent reduction system only has to correspond to the minimum size required for a 750 GPD plant.
- G. The sample port for a sewerage system must be installed immediately downstream of the system and in accordance with the appropriate edition and Section of NSF Standard 40, as currently promulgated, as well as the applicable provisions of this Code.

### **Spray Irrigation Effluent Reduction**

- C. **Spray Irrigation.** The spray irrigation system uses an electric pump that distributes the effluent to the yard through sprinkler heads. It is highly recommended for spray irrigation effluent to be chlorinated in a contact chamber, sized according to §731.A, following the treatment unit and preceding discharge. At a predetermined level, a float switch activates a pump that forces the effluent through piping to pop-up or elevated rotating type sprinkler heads. Evaporation and soil infiltration of the dispersed effluent should prevent any run-off from occurring.
  1. A pump station system must be sized according to use and comply with the applicable provisions of this Part.
  2. The pressure pump must be a minimum of one-half horse power capable of producing a minimum flow of 12 gallons per minute and maintaining 25 pounds per square inch at all sprinkler heads.
  3. The pump will be activated by a high/low water switch through an automatic on/off switch. The pump must be deactivated through a low-volume cut off switch.
  4. A time cycle device may be used to allow for specific sprinkling times (e.g., nighttime, afternoon). The pump chamber must be of adequate liquid capacity to allow sufficient storage to accommodate the desired time settings.
  5. A minimum of three 4-inch type sprinkler heads coded for wastewater effluent, spaced a minimum of 40 feet apart are required.
  6. The spray irrigation sprinklers shall comply with American Society of Agricultural Engineers (ASAE) Standard S 398.1 (Procedure for Sprinkler Testing and Performance Reporting).
  7. The slope of the land shall be such as to facilitate drainage away from any water well or well suction lines. The edge of the spray and its drainage must be a minimum of 50 feet from any private water well and its associated suction lines and 10 feet from any property line. The edge of the spray and its drainage shall be a minimum 100 foot from public any water supply well and its associated suction lines, if any. In addition, the edge of the spray and its drainage shall be a

minimum of 25 feet from any potable water (pressure) lines. As contained in Parts XII and XIV of this Code.

8. Exceptions due to lot size, topography or other constraints may be authorized by the sanitarian parish manager with written notification of such authorization to the sanitarian regional director.