335-7-4-.04 <u>Requirements for New Water Systems and Purchase Systems</u> <u>Installing or Acquiring Surface or Ground Sources</u>.

(1) Prior to submitting a permit application package for the construction of a new community or NTNC water system, an engineering report must be submitted to the Department. All documents associated with the application package should be in electronic format unless paper format is approved by the Department in advance. The Department may require paper format. The engineering report is to provide the following:

(a) A description of the proposed service area $\frac{1}{2}$

(b) If the source of water is to be an existing permitted system, a copy of the executed purchase agreement;

(c) If the source of water is to be a new or newly acquired surface or ground source, a description of the source and treatment processes to be employed;

(b) A copy of a purchase agreement with a permitted public water system or the proposed sources of water supply and a description of treatment processes to be employed,

(c)(d) An estimation of maximum and future water demands by the system,:

(d)(e) A 10-year financial<u>narrative</u> plan that details how the water system will meet the financial, technical and managerial requirements of ADEM Regulations;

(f) An asset management plan that includes the following elements:

1. Asset inventory;

2. The required sustainable level-of-service;

3. Determination of critical assets;

<u>4.</u> Determination of the lowest life-cycle cost options for providing the highest level-of-service over time; and

5. Long-term financing strategy.

(2) Community and NTNC systems shall submit a completed application package when requesting a permit for the construction of a new public water system.

(3) Proposed transient non-community water systems must provide the following:

(a) A completed Department permit application form, paper format is acceptable,

(b) Permit fee as established by the Department.

(c) A summary report describing the functions of the facility, number of anticipated people it will serve, bacteriological and nitrate analyses of the proposed source of supply, well construction data should the proposed source be a well and any sources of contamination which might impact the water quality, and

(d) Information which demonstrates the applicant water system has technical, managerial and financial capacity.

Author: Joe Alan Power, Edgar K. Hughes, Ross Caton.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-23-33, 22-23-49, 22-22A-5, 22-22A-6.

History: May 23, 1977; Repealed and readopted: January 4, 1989; October 31, 1990; effective: December 5, 1990.

Amended: June 7, 2000; Amended: December 12, 2005; Amended: September 25, 2012; Proposed: November 18, 2021.

335-7-4-.07 Facility Permit Renewal.

(1) Public water systems are eligible for permit renewal by submitting a completed application, necessary fees, and any documentation necessary to show the system has technical, managerial and financial capacity and is in complete compliance with the existing permit conditions and regulations of this Department.

(2) Water systems must submit a satisfactorily completed permit application with the appropriate permit fee to the Department requesting permit renewal no less than 180 days prior to permit expiration. Such an application will be accepted by the Department for processing up to 12 months prior to the expiration of the facility permit.

(3) The Department may, based on compliance history or deficiencies noted during inspections, require an existing public water system to submit an asset management plan as detailed at 335-7-4-.04(1)(f) as a condition of permit renewal.

Author: Joe Alan Power, Edgar K. Hughes, Ross Caton.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-23-33, 22-23-49, 22-22A-5, 22-22A-6.

History: Repealed and readopted: January 4, 1989; October 31, 1990; effective December 5, 1990.

Amended: June 7, 2000; Amended: March 12, 2002; Amended: December 12, 2005; Proposed Rules: November 18, 2021.

335-7-7-.04 <u>Water Storage Tank Maintenance</u>. All public water systems are to have their water storage tanks inspected at regular intervals. Any deficiencies identified during an inspection should be repaired in a timely manner.

(1) For the purposes of this rule, "water storage tank" or "storage tank" shall mean any vessel designed to store finished drinking water that is owned or operated by the public water system. This includes clearwells, hydropneumatic tanks with hatches or manholes for access to its interior, and storage tanks that are out of service but still connected to the distribution system.

(2) Public water systems shall develop and implement a written maintenance plan for all water storage tanks. The plan at a minimum shall include the following:

(a) Schedule for the inspection/cleaning of each water storage tank, not to exceed 5 year intervals.

(b) The current coating type for each water storage tank, with particular emphasis placed on coatings which contain lead, coal tar, other coatings no longer NSF approved for use in a water storage tank.

(c) Separate specifications for the inside and outside coatings describing when the coating has failed and must be repaired.

(d) The method that will be used to disinfect the water storage tank after each inspection/cleaning. The disinfection method selected shall comply with AWWA C692 (latest edition) for Disinfection of Water-Storage Facilities. Two bacteriological samples taken 24 hours apart which are total coliform negative is required before returning a water storage tank to service.

(e) Schematics (as-built drawing if available) depicting the water storage tank's dimensions and configuration for all major components. If a mixer is present, the plan shall include the operational parameters for the mixing system if applicable.

(3) Inspection/Cleaning Requirements.

(a) All storage tanks constructed prior to January 1, 2022, shall have an initial inspection/cleaning under this regulation completed by December 31, 2027.

(b) All storage tanks constructed on or after January 1, 2022, shall have an initial inspection/cleaning under this regulation completed no later than five years from the date of construction.

(c) All storage tanks shall be inspected/cleaned at least once every five years following the date of the initial inspection/cleaning under this regulation.

(4) No storage facility may be returned to service until all significant deficiencies have been repaired. A significant deficiency is any deficiency where there is a potential for the water to become contaminated. This includes, but is not limited to, the following:

(a) Missing roof hatches;

(b) Missing or incorrectly sized screens on vent pipes. The proper size screen is #20 mesh or smaller made from a non-corroding material;

(c) Holes in the roof or walls;

(d) Roof joints that are no longer properly sealed;

(e) Overflow lines without proper protection which includes a screen and flap valve or another acceptable configuration (e.g., duckbill valve);

(f) Improper air gap for an overflow line;

(g) Connection to a sanitary sewer system; or

(h) Missing or cracked rubber gaskets around hatches.

(5) If any tank has a significant deficiency identified, a summary report shall be written and submitted to the Department within 14 days of the inspection. This report should also include the corrective action and the timeframe for repair.

(6) A final inspection report shall be written separate from a summary report and shall be maintained on file at the water system for public review and review during inspections. The report shall be maintained for a minimum of 10 years.

(7) The final report shall include a description of any objects or contaminants found in the water storage tank and the most likely entry point.

(8) The final report shall be detailed, including pictures and/or videos, describing all conditions discovered during the inspection, not just a list of deficiencies.

(9) All inspection and summary reports shall be signed by a qualified tank inspection professional. This individual shall possess experience inspecting storage tanks of similar design and size, according to generally recognized standards of the water utility industry.

Author: Edgar Hughes, Dennis D. Harrison, <u>Ross Caton</u>.
Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-23-33, 22-23-49, 22-22A-5, 22-22A-6.
History: December 12, 2005.
Amended: January 22, 2008; Proposed: November 18, 2021.