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March 1, 2022

MEMORANDUM

TO:

Water System Officials

FROM:

Aubrey White, Chief

Drinking Water Branch

RE:

Drinking Water Regulatory News

Several issues will affect water systems this year that I wish to bring to your attention:

1. The Alabama Environmental Management Commission (EMC) recently approved changes to ADEM Admin. Code Div. 7. First, new water systems or purchase water systems that wish to begin producing their own water for the first time will be required to submit a detailed asset management plan along with their permit application. For water systems with a history of noncompliance or deficiencies, an asset management plan may be required as a condition of permit renewal. Attached to this memorandum is a copy of the new rules that will become eff etive April 14,2022.

Second, the EMC also approved prescriptive rules on the inspection and maintenance of water storage tanks. Please read these rules carefully (also attached) as there are new requirements that will affect every water system that has finished water storage. Most notable are requirements for developing a written tank maintenance plan, and detailed inspedions by a qualified individual or firm at least once every five years. These rules also go into effect April 14, 2022.

2. There have been several moves by EPA related to the Lead and Copper Rule (LCR). The Long Term Revisions to the Lead and Copper Rule (LCRR) became effective last December, with compliance required by October 16, 2024. ADEM intends to modify its rules to adopt these revisions in late 2022. However, EPA has also announced that it will undertake additional rulemaking ("Lead and Copper Rule Improvements", or LCRI) to further modify the LCR before the LCRR compliance date. This uncertainty makes it difficult to prepare for what will be required of water systems on the compliance date. EPA has stated that the service line inventory requirement of the LCRR will not be modified by the LCRI, meaning water systems should prepare now to complete a service line inventory by October 16, 2024. We are expecting detailed guidance from EPA on this portion of

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the LCRR within the next few weeks, and we will provide a link to the guidance to the three email contacts we have on file for your water system.

Until the guidance is available, we are unable to provide complete instructions on how to prepare the inventories. The LCRR requires community and non-transient non-community water systems to inventory ALL service lines — not just lead — and the database of service lines must be made available to the public and submitted to us. As soon as we know the required data elements for this effort, we will begin drafting an application or file to enable electronic submission of the inventory to ADEM. Please make sure you have updated your contact information at http://app.adem.alabama.gov/awecs so thatyou do not miss any communications from us as we navigate the major changes to the LCR together.

3. On the PFAS front (Per- and Polyfluoroalkyl substances), EPA plans to release new health advisories over the next several months. Of most significance to Alabama water systems will be newly-revised advisories for PFOA and PFOS. It is possible that these new advisories will be much lower than the current 70 PPT combined value. EPA is also continuing work on development of drinking water standards (MCLs) for PFOA and PFOS, and they expect to have draft standards published for comment late this year.

Meanwhile, some water systems (those water systems that sampled during UCMR3 but have not resampled) are required to sample for PFAS this year. Please check your sampling schedule in eDWRS if you are unsure what monitoring is due this year.

4. Finally, if you are one of your system's contacts for compliance, you should have received emails from the SRF program about the availability of funding for water system improvements. I hope your system has made application for funding (which in many cases will be fully or partially forgiven loans); if not, please contact the SRF section at srf@adenalabama.gov as soon as possible. Please take advantage of this once-in-a-lifetime opportunity to upgrade your water system with low or no-cost financing.

Should you have any questions, please contact your district inspector directly or you may contact the Drinking Water Branch at (334) 271-7773.

Enclosure: Excerpts from ADEM Admin. Code Div.7

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION - WATER SUPPLY PROGRAM

CHAPTER 335-7-4 PERMIT REQUIREMENTS AND PROCEDURES

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335-7-4-.01 Applicability. This chapter applies to each person in the state proposing to construct a new community or NTNC public water supply system or place into use a non-community water system. It also applies to each community, non-community, and NTNC water system seeking to make significant improvements or major modifications to an existing system.

Author: Joe Alan Power, Edgar K. Hughes, Dennis D. Harrison.

Statutory Authority: Code of Alabama 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: December 12, 2005; January 22, 2008.

335-7-4-.02 <u>Fadity Permit</u>. All public water systems must possess a current Water Supply Permit authorizing the furnishing of water for potable use prior to beginning operation, unless specifically exempted by 335-7-1-.02. All general and special conditions that are part of such permit must be met. All non-permitted systems or facilties meeting the definition of a public water system are prohibited from providing water for human consumption.

(a) Facility permits for community systems are issued for a period of six years.

335-7-4-.03

(b) Facility permits for non-community and NTNC systems are issued for a period of ten years.

Author: Joe Alan Power, Edgar K. Hughes.

Statutory Authority: Code of Alabama 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: December 12, 2005.

335-7-4-.03 Permitting Requirements for System Additions.

- (1) A permit to construct is required for, new water storage facilities, new or expanded water sources or treatment plants, pumping facilities, and distribution system additions which will significantly affect system hydraulics at community and NTNC water systems.
- (2) Prior to submitting a permit application package for additions to an existing community or NTNC water system, an engineering report may be required by the Department. This report shall include the following:
 - (a) Details of the proposed project, including its location on a map,
 - (b) Its relationship to the existing system,
 - (c) Its impact on the existing system,
 - (d) The facilities to be included,
- (e) If required by the Department, alternatives to the proposed project and the justification for choosing the proposed alternative, and
- (f) Any additional information the Department deems necessary to adequately address the requirements of ADEM Regulations.
- (g) All information should be submitted in electronic format unless paper format is approved by the Department in advance. The Department may require paper format.
- (3) Prior to beginning construction on a system addition, the Department must issue a Water Supply Permit to construct the proposed addition.
- (4) Community and NTNC systems shall submit the following permit application package when requesting a permit for the construction of significant modifications:
- (a) A cover letter with a description of the project, the water system name, and any other pertinent information,

- (b) A completed Department application form, paper format is acceptable,
 - (c) Permit fees as established by the Department,
- (d) A layout map showing the location of the project as it relates to existing water system(s) in the area, and
- (e) A set of plans and specifications reflecting acceptable construction techniques and design. Plans not meeting Departmental guidelines should be accompanied with documentation supporting design differences. If paper format is submitted, plans should be on 11X17 paper or smaller unless approved by the Department in advance.
- (f) Information which demonstrates the applicant water system has technical, managerial and financial capacity may be required.
- (5) From the effective date of the permit until the requirements of 335-7-4-.10 are met, the water system shall submit to the Department quarterly progress reports, which provide the status of construction and the estimated date of completion. A project update must also be submitted within 72 hours of a request from the Department.
- (6) Transient non-community water systems proposing facility additions must provide the following:
- (a) A completed Department application form, paper format is acceptable,
 - (b) Permit fee as established by the Department, and
- (c) Any additional information the Department may require to complete a review of the facility addition.

Author: Joe Alan Power, Edgar K Hughes.

Statutory Authority: Code of Alabama 1975, §§ 22-23-33, 22-23-49, 22-2A-5, 22-22A-6

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

Amended: December 12, 2005; January 18, 2011; September 25, 2012.

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

(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

335-7-4-.04

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;
- (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 ornewly acquired surface or ground source, a de spito n 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 the seri p tion of treatment processes to be employed;
- $\frac{(e)(d)}{d}$ An estimation of maximum and future water demands by the system;
- (d)(e) A 10-year-financialnarrative 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:
 - Asset inventory;
 - The required sustainable level-of-service;
 - Determination of critical assets;
- 4. 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-commutity 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: Code of Alabama 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; December 12, 2005; September 25, 2012.

335-7-4-.05 <u>Engineering Requirements</u>. Plans and specifications submitted for new community and NTNC water systems or significant improvements or major modifications to these systems must bear the seal and signature of an engineer licensed by the Alabama State Board of Registration for Professional Engineers and Land Surveyors.

Author: Joe Alan Power, Edgar K. Hughes.

Statutory Authority: Code of Alabama 1975, §§ 22-23-33, **2**2-23-49, 22-22A-5, 22-22A-6.

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

effective: December 5, 1990. **Amended:** December 12, 2005.

335-7-4-.06 Permits Approval/Denial.

- (1) Upon receipt of a complete application, appropriate fees, and necessary information to evaluate the water quality, system facilities, and operational aspects, existing and proposed system facilities will be evaluated. Existing and proposed systems must demonstrate technical, managerial, and financial capabilities to reliably meet performance requirements on a long term basis and be self-sustaining. After a determination has been made that the proposed water system or additions to the system are satisficory and the existing system has technical, managerial and financial capacity and is in complete compliance with all regulations, a permit will be issued.
- (2) If after the review of the application and information submitted shows water quality deficiencies, design problems or technical, managerial or financial capacity deficiencies, a formal request for additional information to clarify the problem areas will be made to the applicant. Upon failure to receive this additional information or if upon review of the supplemental information the proposal is still unsatisfactory, the permit will be denied. Permit denial will be made in writing to the applicant with reasons for the denial stated.

Author: Joe Alan Power, Edgar K. Hughes.

Statutory Authority: Code of Alabama 1975, §§ 22-23-44, 22-23-49, 22-22A-5, 22-22A-6.

History: Repealed and readopted: January 4, 1989; October 31, 1990; Revised: September 23, 1992; effective November 9, 1992.

Amended: June 7, 2000; December 12, 2005.

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: Code of Alabama 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; March 12, 2002; December 12, 2005.

335-7-4-.08 Revocation of a Water S uply Permit. A permit issued by the Department may be revoked for any of the following causes:

- (a) Failure to comply with the general or special conditions of the permit;
- (b) Failure to establish and maintain such records, make such reports, maintain treatment equipments or provide satisfactory operation of water facilities;
- (c) Failure to provide water which meets state and federal drinking water standards;
- (d) Failure to comply with provisions of a Departmental Administrative Order or regulations;
- (e) Failure to allow identified employees of the Department access to all

- 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) Scledule 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 containlead, coal tar, other coatings no longer NSF approved for use in a water storage tank.
- (c) Separate s p effections 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 C652 (latest edition) for Disinfection of Water-Storage Facilities. After the storage tankhas been properly disinfected and refilled to an accepble disinfectant residual in accordance with ADEM Admin. Code r. 335-7-10-.04, two consecutive bacteriological samples shall be collected not less than 30 minutes apart and analyzed to be absent of total coliform before the storage tank may be returned to service.
- (e) Schematics (as-built drawing if available) depicting the water stora ge 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) Allstorage tanks constructed prior to January 1,2022, shall have an initial inspection/cleaning under this regulation completed by December 31, 2027.
- (b) Allstorage tanks constructed on or after January 1, 2022, shall have an initial inspection/cleaning under this regulation co meted no later than five years from the date of ostru ti on.
- (c) All storage tanks shall be in spected / cheed 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 s i giniant deficiencies have been repaired. A significant d effect 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 roofor walls;
 - (d) Roof joints that are no longer properly sealed;
- (e) Overflow lines without proper protection which indudes a screen and flap valve or another acceptable configuration (e.g., duckbill valve);
 - (f) Improper air gap for an overflow line;
 - (g) Conneto n to a sanitary sewer system; or
 - (h) Missing or cracked rubber gaskets (if required) around hatches.
- (5) If any tank has a significant deficiency identite d, 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 inspetion 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 inspetions. 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 insection, 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 ex periode inspecting storage tanks of similar design and size, according to generally recognized standards of the water utility industry.

Author: Edgar Hughes, Dennis D. Harrison, Ross Caton.

Staut ory Authority: Code of Alabama 1975, §§ 22-23-33, 22-23-49, 22-22A-5,

22-22A-6.

History: December 12, 2005. Amended: January 22, 2008.