

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHAPTER 653. AQUIFER STORAGE AND RECOVERY  
SUBCHAPTER 1. GENERAL PROVISIONS**

**252:653-1-5. Definitions**

The following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

**"Activity"** means the construction or operation of an ASR treatment plant, or the construction and operation of an ASR recharge well, infiltration basin or any other water delivery mechanisms, including all ASR-related activities under this Chapter.

**"Applicant"** means any person who submits a permit application for ASR activities under this Chapter.

**"Aquifer"** for the purposes of this Chapter, means a subsurface water-bearing zone limited in extent by the area of hydrologic effect associated with the ASR project.

**"Aquifer Storage and Recovery" ("ASR")** means delivery of water into an aquifer for later recovery and use. For purposes of this Chapter, ASR activities shall not include groundwater recharge or augmentation through a natural connection with a farm pond or other impoundment otherwise authorized by law. ASR activities shall not include groundwater recharge or augmentation from nonpoint source runoff or stormwater discharge under the jurisdiction of the Oklahoma Department of Agriculture Food and Forestry pursuant to 2 O.S. §§ 2A-1 *et seq.* For purposes of this Chapter, ASR activities shall not include activities specifically authorized pursuant to 82 O.S. § 1020.2(G) or stormwater runoff management practices otherwise authorized by law. ASR does not constitute water reuse.

**"ASR Project"** means a project regulated under this Chapter; including ASR construction and operation activities.

**"Area of Hydrologic Effect"** means the ~~area~~ areal extent of all hydrologic features, including surface and groundwater, determined by the projected extent of the underground stored water as calculated by using site-specific hydrogeologic information, and as influenced by the specific design and anticipated operation of the ASR project.

**"Drinking Water Treatment Residuals"** means wastewater (e.g. membrane filter reject water) from drinking water treatment processes.

**"Infiltration Basin"** means a shallow structure that is used to infiltrate water through permeable soils into an aquifer for ASR projects.

**"Limited-Scale ASR Pilot Projects"** means ASR pilot projects authorized by 27A O.S. § 2-6-110.

**"Monitor Well"** means any well used for the sampling or measurement with field instrumentation of any chemical or physical property related to ASR activities.

**"Person"** means any individual, corporation, industry, firm, partnership, association, venture, trust, institution, local governmental entity, or agency that seeks to conduct ASR activities under this Chapter.

**"Raw Water"** means untreated water from any source used in an ASR project.

**"RWACP"** means Raw Water and Aquifer Characterization Plan required by Subchapter 3 of this Chapter.

**"Stored Water"** means water in the aquifer that has been delivered pursuant to an ASR project.

"Treated Water" means raw water that has undergone treatment within a water treatment plant meeting the requirements of this Chapter.

**252:653-1-10. [REVOKED]**

**252:653-1-12. Fees [NEW]**

- (a) **Permit application fees.** The permit application fee for each ASR permit is as follows:
- (1) ASR Treatment Plant Construction Permit - \$3,000
  - (2) ASR Water Delivery Construction Permit - \$10,000
  - (3) ASR Operations Permit - \$10,000
- (b) **Annual operating fee.** The annual operating fee for an ASR facility, permitted under Subchapter 9 of this Chapter, is \$5,000 per year due on the anniversary of permit issuance.

**SUBCHAPTER 5. ~~ASR~~ AQUIFER STORAGE AND RECOVERY TREATMENT PLANT CONSTRUCTION**

**252:653-5-1.1. Notification**

The applicant shall provide notice of the application by certified mail (return receipt requested) to all landowners of the properties that border the proposed ASR treatment facility boundary. The notice shall be approved by DEQ and include the information required by OAC 252:4-7-13(c).

**SUBCHAPTER 7. ~~ASR~~ AQUIFER STORAGE AND RECOVERY WATER DELIVERY CONSTRUCTION**

**252:653-7-5.1. Notification**

- (a) The applicant shall provide notice of the application to the following:
- (1) by certified mail (return receipt requested) to all landowners of the properties that border the proposed ASR water delivery and recovery surface structure boundaries;
  - (2) by certified mail (return receipt requested) to irrigation, industrial, commercial and public water supply permit holders in the area of hydrologic effect;
  - (3) water rights owners in the area of hydrologic effect, as directed by DEQ;
  - (4) ground water associations, as directed by DEQ; and
  - (5) associations that represent oil and natural gas operators, as directed by DEQ.
- (b) The notice shall be approved by DEQ and include the information required by OAC 252:4-7-13(c).

**252:653-7-7. Aquifer testing**

In addition to the requirements of OAC 252:653-7-2, a plan shall be submitted to DEQ with appropriate bench-scale testing followed by field-scale pilot testing and modeling for evaluating, through appropriate testing and modeling, the compatibility of the delivered water with the receiving aquifer water for possible subsequent changes in aquifer characteristics, groundwater, or stored water due to hydrogeologic or hydrogeochemical changes ~~shall be submitted to DEQ~~. The plan shall include provisions for testing to determine if the proposed full-scale, long-term project

is hydrologically feasible and to collect and evaluate operational, hydrologic, and geologic data, including dissolution rates, needed to support operational application for a full scale project.