

ASR Limited License (ASR LL) applications require extensive attachments. Consult OAR 690-350-010 to -030 for a complete description. The following list summarizes the major components required to file a complete ASR LL.

- 1. ASR Limited License Application Form and maps per 690-350-020(3)**
- 2. ASR Test Program Report, developed and signed by Registered Geologist (RG)**
 - Injection rates and schedules
 - Water storage volumes and durations
 - Recovery rates and schedule
 - Water quality sampling including Quality Assurance and Quality Control Plan
 - Water level monitoring plan including location of observation wells (including at least one dedicated observation well that is not an ASR well)
 - Contingency plan for use of recovered water if the intended use isn't possible
 - Final project scope and conceptual design
 - Annual testing report outline
- 3. Proposed System Design Report , developed and signed by Professional Engineer (PE)**
 - Injection, recovery, observation and source well construction information
 - Well head assembly and piping system for injection and recovery
 - Other conceptual design components of the system
- 4. Hydrogeologic Report, developed and signed by RG with expertise in hydrogeology**
 - Local geology and conceptual hydrogeologic model
 - Description of aquifer targeted for storage
 - Estimated groundwater flow direction and rate of movement
 - Allocation of surface water springs or wells within the area affected by ASR wells
 - Rational for estimating the affected area
 - Anticipated changes to groundwater system due to proposed ASR testing
 - Potential natural resource problems associated with testing
 - Groundwater and surface water conditions prior to ASR
 - Description of how these factors affect ASR feasibility, including recoverability of stored water

5. Quality of Source Water

- Quality and treatment of proposed injection source water during proposed injection season
- Oregon Health Authority Drinking Water Services (OHA) per OAR 333-061
 - Contact : Tom Pattee, Groundwater Coordinator, Tom.Pattee@state.or.us
- Oregon Department of Environmental Quality (DEQ) per 340-040
 - Contact Eastern Oregon: Phil Richerson , Phil.Richerson@state.or.us
 - Contact Western Oregon: Seth Sadofsky , Seth.Sadofsky@state.or.us
- Also include:
 - Alkalinity or bicarbonate, calcium, magnesium, iron, manganese, sodium, potassium, chloride, sulfate, silica, TDS, pH, redox potential and temperature
- Demonstrate source water meets standards set out in 690-350-020(3)(E)

6. Quality of Receiving Aquifer Water

- Same constituent list as Source water

7. Evaluate water quality compatibility for potential changes during storage

Timelines

- Agencies (OWRD, OHA, ODEQ) have 45 days to determine completeness after an ASR application is received by OWRD. This is followed by a notice to applicants regarding completeness.
- If incomplete, the process stops until deficiencies are remedied. OWRD receipt of application amendments begins another 45 day completeness review.
- Once complete, the application goes to a 30 day public comment period.
- Comments may trigger further requests for application amendments.
- The Department has 60 days to act on an application after close of comment period.
- Average time between ASR LL application receipt and issuance is 1 year.

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