



TEXAS BRACKISH GROUNDWATER DESALINATION FACILITIES

OPERATIONAL PERMITS

These are not necessarily permits, but rather standards to which the desalination facility must ensure it is compliant throughout its operation.

FEDERAL CONSIDERATIONS



There are few federal regulations that directly govern brackish groundwater desalination in specific states. However, it is important to note that the Safe Drinking Water Act (SDWA) authorizes the delegation of federal standards to Texas state agencies.

STATE CONSIDERATIONS

Water Well Registration: Approval is required for existing wells. Drillers must submit well registration after it is constructed.

Permit to Produce Water: Approval from your local groundwater district is required to produce water from existing wells.

High Impact Production Permit: Approval from your local groundwater district is required to own and operate wells crossing a high production threshold.

Water Well Construction and Alteration Permit: Approval from TCEQ and your local groundwater district is required for new wells or modifications to existing wells.

Well and Test Hole Permits: Approval from the TCEQ and your local groundwater district is required for wells and test hole installation.

Groundwater Protection Recommendation Letter & Class II Underground Injection Control Permit (UIC): Permit required from TCEQ and Railroad Commission for beneficial reuse via Class II wells

Class I Underground Injection Control (UIC) Permit: Permit required from TCEQ to inject concentration brine from reverse osmosis back into the ground.

Certification of Operators for Public Water Supply System: Those hired to operate the reverse osmosis plant must be certified and trained at the Class D level, and upgraded to Class C after one year.

Final Public Well Completion Approval: TCEQ must approve completed wells.

Air Permit: Electric generators and water treatment units are subject to permitting by TCEQ.

Texas Land Application Permit (TLAP): Required from TCEQ if water is discharged to the waters of the state.

Commercial Industrial Non-hazardous Waste Permit: Required from TCEQ for storage and treatment of non-hazardous waste.

Sludge Disposal Registration: Required from TCEQ for sand/multi-media filtration sludge disposal.

Air-Permit - Title V Operating Permit: Required from TCEQ for degasification and other ancillary equipment that emit air pollutants.

LOCAL CONSIDERATIONS



Municipalities and counties have additional permitting requirements. Permit names, requirements, and issuing departments may vary among cities. Though local permits are not uniform, there are some universal considerations including: coordination with local energy companies; county right-of-way permit; floodplain development permit; sewage and septic permits; water quality site development permit; building permit; fire marshal approval; city tree ordinances; construction trailer permits; platting considerations; and tank permits