MAXIMUM INJECTION RATE ALTERNATE AOR METHOD
STATIC FLUID LEVEL MEASUREMENT

Use of Static Fluid Level Measurement as alternate compliance method with 62 IAC Section 240.360.

Specifically 62 IAC Section 240.360, requires the applicant to submit evidence for all wells which penetrate the injection formation within the AOR and which are determined by the Department to contain an inadequate amount of cement or are inadequately constructed or plugged, that injection into the proposed well and formation will not cause contamination of the freshwater zone. If well fluid level measurements are required as part of the submitted evidence, the fluid level measurements shall be witnessed by a Department Well Inspector.

The following DEFAULT values will be utilized in calculating the allowable Maximum Injection Rate (B/D) unless the applicant proposes alternate values. Supporting documentation for proposed values must be provided and will be subject to review by the Department.

Well Name: _____ Reference #: _____

Section: ____ Township: ____ Range: ____ Location (PLSS): _____

Formation Name	Interval Depths (ft.) TOP	BOTTOM

Value Name	Default Value	Proposed Value
Injection Fluid Viscosity (u) (centipoise (cp))	**1.1**	
Form Vol Factor RB/STB B_w	**1**	
Permeability (md) k	**50**	
Compressibility (1/psi) c	**7.5×10^{-6}**	
Porosity (percent) ϕ	**8%**	
Time (days) t	30 years or 10,950 days	□ 10 years, 3650 days □ 20 years, 7300 days

Injection Fluid Viscosity: Viscosity of fluid is a function of temperature, salinity, and pressure. As temperature decreases, viscosity increases. As salinity and/or pressure increases so does the viscosity.

Formation Volume Factor: Produced water formation volume factor (FVF), B_w, is defined as the volume at reservoir conditions occupied by 1 stock tank barrel (STB) of formation water plus its dissolved gas.

Permeability of the injection interval (each injection interval by formation).

Compressibility is the total compressibility of the formation and fluid.

Porosity: The measured average porosity within the injection interval expressed as a percent (each injection interval by formation).

Time: Evaluates the effect of injection at a specified time after the initial injection.