

Arizona Department of Environmental Quality Decision Trees for PFAS: Mitigation Selection in Drinking Water



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The Arizona Department of Environmental Quality (“ADEQ”) has issued a document titled:

Decision Trees for PFAS – Mitigation Selection in Drinking Water (“DTP”).

The stated purpose of the DTP is to:

...assist the engineers of public water utilities in making informed decisions and determining the most suitable non-treatment and treatment alternatives for mitigating per- and polyfluoroalkyl substances (“PFAS”).

The DTP provides sequential guidance addressing:

- What information to collect.
- What screening tests to perform.
- How to select the most appropriate mitigation alternative through the use of a series of Decision Trees.

The recommended use of the DTP is:

...very early in the planning stages, after PFAS exceedances are detected and as a utility is starting to consider compliance options and conceptual design, to set the foundation for the future steps which include:

- Evaluation of selected alternative.
- Cost analysis.
- Detail design.
- Eventually permitting.

ADEQ states that the DTP’s purpose does not require a specific approach. Instead, its stated objective is to support utilities in determining the most appropriate path forward.

ADEQ states that the decision tree approach has been utilized for similar water treatment purposes. It cites the United States Environmental Protection Agency (“EPA”) 2003 Arsenic Treatment Technology Evaluation Handbook for Small Systems. That document is stated to have been used as the primary basis for the DTP.

The DTP recommends that alternative strategies should be prioritized initially, such as non-treatment alternatives.

These are stated to include connecting to a neighboring public water system that meets the PFAS maximum contaminant levels at the intertie.

The rationale for this preference is of course:

- Lower capital investments.
- Reduced operations.
- Smaller maintenance and labor costs.

Nevertheless, if such non-treatment alternatives are not available then the utility is referred to Best Available Technologies that have already been demonstrated full scale efficacy in the field.

Key components of the DTP include:

- Overview of alternatives.
- Selection criteria and water quality parameters built into Decision Trees.
- Navigating Decision Trees.
- Six Decision Trees for non-treatment and treatment alternatives.

A copy of the DTP can be downloaded [here](#).