



NRDC EPA PETITION – UIC AQUIFER EXEMPTION CRITERIA

Issue Summary

On March 23, 2016 the Natural Resources Defense Council (NRDC) filed a petition with the EPA under the Administrative Procedure Act (APA) seeking changes to the aquifer exemption (AE) program under the Safe Drinking Water Act (SDWA).

Among other things the petition demands the Environmental Protection Agency (EPA):

1. Impose a moratorium on all AE related decisions including granting new exemptions or expanding the boundaries of existing exempt areas.
2. Update the regulations and criteria for designating exempt aquifers through a formal rulemaking process.
3. Eliminate criteria that allow aquifers to be exempted when hydrocarbons are demonstrated to be naturally occurring in the groundwater.
4. Consider increasing the threshold for Underground Source of Drinking Water (USDW) protection from 10,000 mg/L TDS to as high as 40,000 mg/L TDS.
5. Revisit all previously issued exemptions to determine if the exemptions should be rescinded based on the new criteria.

The NRDC asserts that new information has arisen since the aquifer rules were written, and that the EPA must update its rules to account for increasing groundwater demand, climate change, and technological advancements for brackish groundwater desalination.

EPA Process for APA Petitions

The EPA retains considerable discretion under the APA on how quickly it must respond to petitions.

It can choose to grant approval and initiate a rulemaking proceeding, or deny the petition outright. Since there are no timing restrictions that guide the EPA's response, the agency can act promptly and without significant public notice, or it can delay its response for an extended period. The EPA is not required to hold a public comment period before it takes action on a petition.

Importance of Class II Injection Wells

Class II injection wells are essential to oil and natural gas production. Primary uses of injection wells include the injection of water, steam, and CO₂ to conduct enhanced oil recovery (EOR) and water disposal associated with oil and natural gas production in areas where no other disposal options are available. Without the ability to utilize Class II injection wells, American oil and natural gas production in many areas of the country would be dramatically curtailed or shut in altogether..

Under the SDWA, Class II injection activity is allowed in areas where the groundwater quality exceeds the USDW threshold of 10,000 TDS mg/L. Injection where the groundwater contains less than 10,000 TDS mg/L is only allowed in areas that have been formally exempted pursuant to a state application that has been submitted to the EPA. The EPA maintains general criteria that an application must demonstrate in order to qualify for an exemption, not the least of which is that the area proposed for exemption does not supply drinking water, and cannot feasibly be expected to economically provide drinking water. The existing criteria require extensive geologic and water quality information to be submitted in order to gain approval and provide significant flexibility to allow the state and federal agencies involved in the review to consider site specific factors that are relevant to the decision.

Implications to American Energy Supply of Petition Approval by EPA

The proposed actions sought in the NRDC petition could potentially halt the ability of states to permit new injection wells until the EPA conducts a multiyear rulemaking proceeding. Development of new water disposal and EOR wells would likely be placed in limbo while the EPA reviews the status of areas that have been exempt for more than thirty years and considers whether to revise the definition of a USDW. State regulatory agencies in areas where the groundwater exceeds 10,000 mg/L TDS could prospectively be forced to spend considerable resources preparing applications to go through the federal exemption process as a condition of maintaining operations they had already permitted and were actively regulating.

In California, the third largest producing area in the country, EPA Region 9 directed the California Division of Oil, Gas & Geothermal Resources (DOGGR) in 2010 to update the exemption boundaries for more than 50 oil fields throughout the state. More than 25 applications have already been prepared using the current approved criteria and are being submitted to the EPA for review. New drilling in many areas of the state has been put on hold for the past several years while the scientific based applications have been under development. Approval of the NRDC petition would essentially nullify the significant resources that have been expended in an effort to comply with the EPA's directive and would extend the drilling moratorium in perpetuity.

Abrupt agency approval of the application would also likely lead to a significant reduction in drilling new production wells. Without adequate injection well capacity to handle produced water, some producers may be forced to suspend capital investments in new production wells. Many areas with oil and natural gas resources would likely be precluded from development altogether if the resources require EOR operations or the operators do not have access to reasonable methods of produced water disposal and management. Major oil and gas producing states impacted by this review include: California, Utah, Colorado, Wyoming, North Dakota, Texas, Louisiana, Ohio, and Oklahoma among others.

Industry Response

The lack of confirmed impacts to groundwater from oil and natural gas related injection activities validates that the historic criteria used by EPA has served to protect areas with true groundwater supply potential. Furthermore, the existing criteria provide the state regulatory agencies significant flexibility in making decisions to protect local groundwater resources while facilitating new oil and natural gas development.

The goal of the NRDC petition is to dramatically advance the "Keep It In the Ground" agenda by imposing a multiyear moratorium on a critical type of well that is essential to supporting existing and new oil and natural gas operations.

Legislative and report language is being sought to reaffirm the historic effectiveness of the SDWA criteria, and to limit federal disruption of the permitting processes utilized by the states for injection activity.