

My name is Mike Nickolaus M I K E N I C K O L A U S and I am the Special Projects Director for the Ground Water Protection Council. The GWPC is the association of state groundwater and underground injection control agencies and assists the states by facilitating federal/state program coordination, providing regulatory development assistance, technology transfer and data systems assistance. One of the programs of the GWPC is the Class II Underground Injection Control (UIC) peer review process. The goal of the review process is to evaluate the state Class II UIC program against the requirements for federally delegated programs and to determine if the program is effective in achieving the goal of protecting underground sources of drinking water. The review process involves an evaluation of the states Class II UIC program conducted by a team of experts from Class II UIC programs in other states and includes an evaluation of the states regulations, programmatic elements, staffing, bonding, field operations, permitting, enforcement and compliance, and administrative processes. It is conducted via an in-state interview of the state regulatory staff along with a review of the official regulations, program delegation documentation, and responses to a questionnaire. A review of the NOGCC Class II program was requested by the commission in September, 2015 and the in-state interview was conducted on November 11, 2015. The review team consisted of 3 state UIC program representatives (one from Utah and two from Ohio). These representatives have a total of over 50 years of UIC experience. Additionally, the in-state interview was facilitated by a former USEPA UIC program manager and Environmentally observed by a representative of the USEPA Region 8 office and a staff attorney from the Environmental Defense Fund. Also present were Natural Resource Committee Chair, Senator Schilz, Committee Member Senator Stinner, Ms. Laurie Lage, the NRC Legal Counsel and Ms. Marty Link a representative of the NDEQ. Although the report is currently in being drafted I can relate some of our preliminary findings and recommendations.

Overall, we found the Class II UIC program managed by the NOGCC to be a well run, efficient, and effective program that meets or exceeds all of the requirements for a federally delegated UIC program under Section 1425 of the Safe Drinking Water Act. Several elements struck the review team as being particularly significant including the following:

1. The NOGCC uses a 1/2 mile Area of Review to evaluate wells that could potentially be affected by an injection well. This is twice the size of a typical state AOR, which is usually 1/4 mile.
2. The NOGCC has a well thought out and progressive system for determining field inspection priorities. This system, which includes evaluations of environmentally sensitive areas, operator compliance history, well history and well type results in an inspection protocol that is protective of the environment.
3. The well construction requirements for injection wells in Nebraska exceed the level required to assure groundwater isolation during the injection process.
4. The NOGCC has additional requirements on commercial wells even though this is not required of delegated state programs generally.
5. The program requirement for operational sampling of water wells goes beyond the requirements of a federally delegated program and provides additional protection for groundwater.
6. The UIC program provides both direct and published notice of permit applications. This also goes beyond the requirements of a delegated program and leads to enhanced public participation in the permitting process.
7. The use of "in the field" data access systems allows inspectors to have real time information on wells including their construction, compliance history, and operational status.
8. The NOGCC witnesses 100% of the mechanical integrity tests run on injection wells. This far exceeds program standards and assures that the all important element of well integrity is not in question.

As with any state program we found a number of improvements that might be considered by the NOGCC in the implementation of its program:

1. The NOGCC should develop written procedures including guides and manuals for permitting, well testing, plugging, site investigation and general field and administrative operations. Improvement in this area would assist the agency in assuring that the program is implemented in a consistent manner and that the training and transition for new staff was assured.
2. The NOGCC would do well to define Underground Sources of Drinking Water in a manner consistent with the Safe Drinking Water Act. Although drinking water aquifers in the oil and gas areas of Nebraska do not typically exceed 3,000 mg/L of Total Dissolved Solids, the current definitions in the regulations are inconsistent with the federal standards and could lead to issues should injection begin occurring in other areas of the state where there is drinking water between 3,000 and 10,000 mg/L TDS.
3. The NOGCC should proceed with hiring a replacement for the staff geologist who left earlier in 2015.
4. The NOGCC should consider a change to its current regulations to provide for a maximum number of wells that can be placed under a single blanket bond so that there is a reasonable amount of bonding on a per well basis.
5. Even though the NOGCC does not expect to allow aquifers to be exempted from protection, as allowed by the SDWA, it should insure that it has the authority to process such exemptions should they become necessary.
6. Although, the NOGCC stated that no diesel fuels were used in hydraulic fracturing in Nebraska, should the NOGCC decide to allow their use they may need to adjust their program to be consistent with USBPA Guidance #84 regarding injection of diesel fuels.

Although they will not appear in the report I would like to cite two important points regarding the Nebraska Class II UIC program:

1. The State of Nebraska, through the NOGCC has been a national leader in the development of data management systems that have resulted in more environmentally sound and protective regulation of the oil and gas industry. The NOGCC was an early adopter of the Risk Based Data Management System, a database program currently used by 24 states to manage oil and gas and underground injection control programs. The NOGCC was also instrumental in the development of the FracFocus system, which publicly discloses hydraulic fracturing chemicals and is used by 21 states to inform the public about hydraulic fracturing additives.

2. It is also the opinion of the review team that the Class II UIC program should continue to be run from the NOGCC office in Sidney. This is consistent with other state programs which are run from offices close to the oil and gas fields which they regulate. Even in large states such as Texas and California, where the main program resides in the state capital, there are district offices close to oilfield injection activities throughout the state. In the case of Nebraska where oil and gas and Class II injection activity is centered primarily in the western tier of counties, it is more effective, efficient and environmentally protective for the program to be based in that area.

Finally, I would like to say that it is the review team's position that the Class II UIC program managed by the NOGCC is a good example of a program that uses a minimum of resources to achieve a maximum of environmental protection.

Thank you. I would be happy to answer any questions you might have.