UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Office of
Water

January 28, 2004

Memorandum

SUBJECT: Integration of Underground Injection (Class V) and Source Water Assessment and Protection Program

FROM: Roy Simon, Acting Branch Chief /S/
Prevention Branch

TO: Regional Drinking Water Branch Chiefs,
Regional UIC Branch Chiefs and Representatives
Regional Source Water Representatives

The Underground Injection Control (UIC) Program and the Source Water Assessment and Protection (SWAP) Program have developed national measures to help us ensure that we minimize risk to source waters. However, in order to ensure that prevention programs for ground water based source water areas are effective, ***it is crucial that the UIC and SWAP programs work together and share critical information, in the Regions and in the States***.

States are completing source water assessments each day, and over 35 States will have all CWS assessments completed soon. As of December 31, 2003, states report that source water areas for CWSs are complete in 22 states and are over 50% complete in 13 states. In the other states, much progress has been made. For example, almost all the ground water based source water areas have been delineated in all states.

These source water areas delineated by states under Section 1453 of the Safe Drinking Water Act (SDWA), represent, at a minimum, areas designated to receive priority consideration for protection of public drinking water supplies. The UIC Program has linked its activities to source water protection areas as reflected in the source water and UIC strategic plan measures.

The following are critical reasons for continued information sharing between the UIC and SWP Programs at the Regional and State level so we can make full use of the ground-water based source water areas for minimizing risk from endangering shallow (Class V) injection

wells.

- **Implementation of the Class V Rule**

A priority for UIC Class V activities is the implementation of the 1999 Rule for Class V wells. The Rule requires the closure of all large capacity cesspools and the permitting or closure of motor vehicle waste disposal wells (MVWDW) in regulated areas. Regulated areas, for the purposes of the Rule are ground water protection areas (ground water based source water areas delineated under Section 1453 of the SDWA for community and non-transient non-community systems) and other sensitive areas as identified by the State.

All MVWDW in these ground water based source water areas should be closed (or permitted if allowed) by January 1, 2004. UIC Programs that are targeting inspections of motor vehicle facilities need to have access to these delineated source water areas in order to meet the requirements of the Rule. States who have not completed their SWAP can apply to the UIC Program for a one year extension, relative to the Class V Rule, if they are making reasonable progress toward completing their assessments. MVWDW in other sensitive ground water areas must be closed or permitted by January 1, 2008. With the exception of Nevada, North Dakota and Minnesota, all States have designated their entire state as a sensitive area.

- **Linkage of UIC and SWAP Measures**

SWP and UIC efforts have been linked in the measures. In order to report on some of these measures, UIC programs will have to have access to source water area delineations. For example, for the UIC measures question #1. Are State and Tribal existing UIC wells identified for the year? Measure 1(d) is:

$$\frac{\text{\# of Ground-water based CWS Source Water Areas with Class V Survey Completed}}{\text{\# of Ground Water-based CWS Source Water Areas in the State}}$$

(This measure is also in the Strategic Plan OW Program Activity Measures as PAM 19)

- **UIC Class V Inventory Initiative**

EPA conducted a national study of Class V wells in 1999 to collect background information for use in evaluating the risks that Class V wells pose to underground sources of drinking water (USDWs). States and regions were asked to submit known and estimated Class V inventory numbers for the study. For two well types that are known to be widespread, but have little inventory information, a national estimate was developed using a model. As a result, EPA estimates that more than 650,000 Class V wells are in operation in the U.S. In general, there are significant uncertainties associated with this estimate. As such, EPA believes that a robust national inventory is needed to effectively manage potential risks posed by

Class V wells. We are working closely this year with a HQ/Regional/State workgroup being set up with GWPC and should begin meeting in February. The workgroup will tackle many Class V issues including estimated inventory approaches.

In 2002, EPA began an initiative to inventory Class V wells in UIC Program Direct Implementation states. The goal of the initiative is to increase the number of Class V wells in the inventory and increase the inspectors' efficiency and accuracy through the use of "Personal Digital Assistants" with Global Positioning Systems. Regions are targeting priority areas and well types for this initiative, and the information they collect in SWAs could be used to update contaminant inventories.

- **Use of SWAs for Prioritizing Protection Activities**

Addressing Class V endangering wells in SWAs is a good indicator for determining whether prevention actions are occurring that increase protection of public health. To keep contaminants from endangering Class V wells from entering a water treatment plant is a preventive action that would reduce the risk of consumer exposure to such contaminants. As such, actions to address Class V wells in these areas should have the preventive effect of reducing releases to ground water and thereby reducing exposures of the population to contaminants present in these releases. Therefore, if UIC Programs have information on SWA delineations, they could prioritize activities such as inspections and inventory efforts in those areas.

- **Strengthening of Source Water Assessment Inventories and Susceptibility Determinations**

The inventorying of Class V wells within SWAs will inevitably increase the accuracy and completeness of some of the contaminant source inventories compiled as part of the source water assessments. As Class V wells are identified through both the Inventory Initiative and other inventory efforts, and their locations are recorded or confirmed, information shared with Regional and state source water assessment programs and public water systems should increase the usefulness of the source water assessment information. This will then act as a basis for more precise targeting local prevention efforts resulting, ultimately, in stronger public health protection.

In addition, to the extent that states update susceptibility determinations for their ground water based SWAs over the next five years, increased knowledge of the locations and fluids in Class V wells will increase their knowledge of the

relative threats of Class V wells versus threats from all other significant potential contamination sources.

Finally, the Class V well inventory information can be expected to increase the accuracy and completeness of the data that states report to EPA on the most prevalent and threatening sources of contamination, as these measures are described in the Initial Reporting Guidance for Source Water Assessment and Protection. The enhanced data will provide us with a truer national picture of the greatest threats to source waters used for public water supplies and a more solid basis for targeting federal, state, and local actions to prevent or reduce public exposure to these threats.

I urge you to consider these rationale in support of your ongoing and renewed efforts to share the information, specifically the delineated SWAs and the Class V inventories within these areas, among your two programs. For further information on any of these points, you can contact Steve Ainsworth, Team Leader of the Source Water Assessment Team, and Robyn Delehanty, Team Leader of the UIC Regulatory and Class V Team, or me.