Friday,
June 7, 2002

Part V

Environmental Protection Agency

40 CFR Part 144
Underground Injection Control Program—
Notice of Final Determination for Class V Wells; Final Rule
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 144
[FRL –7225–8]
RIN 2040–AD63

Underground Injection Control Program—Notice of Final Determination for Class V Wells

AGENCY: Environmental Protection Agency.

ACTION: Notice of final determination; and final rule.

SUMMARY: Today, the Environmental Protection Agency (EPA) is announcing a final determination for all sub-classes of Class V injection wells not included in the final rulemaking on Class V motor vehicle waste disposal wells and large-capacity cesspools (December 7, 1999). These include shallow non-hazardous industrial waste disposal wells, large-capacity septic systems, agricultural and storm water drainage wells, and other wells. The Agency has determined that the existing Federal underground injection control (UIC) regulations are adequate to prevent these Class V wells from endangering underground sources of drinking water (USDWs) and no new rulemaking is necessary at this time. Because today’s action fulfills the Agency’s obligation with regard to Class V wells as stated in section 1421 of the Safe Drinking Water Act, EPA is also amending its UIC rules by removing outdated references regarding future Class V regulations. In addition, some minor changes were made to correct mistakes and omissions within the CFR.

DATES: The final determination and rule revisions will be effective on June 7, 2002. Pursuant to 40 CFR 23.7, for the purposes of judicial review, this final determination and rule revisions are issued/promulgated as of 1:00 p.m. Eastern Time on June 7, 2002.

ADDRESSES: The determination and supporting documents, including public comments and EPA responses, are available for review in the UIC Class V, W–98–05V Water Docket, U.S. Environmental Protection Agency, 401 M Street, SW., East Tower Basement, Room 57, Washington, DC. 20460. For information on how to access Docket materials, please call (202) 260–3027 between 9 a.m. and 3:30 p.m. Eastern Time, Monday through Friday.

FOR FURTHER INFORMATION CONTACT: For technical inquiries, contact Robyn Delehanty, Office of Ground Water and Drinking Water (mailcode 4606M), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC, 20460. Phone: 202–564–3880. For general information, contact the Safe Drinking Water Hotline at 800–426–4791. The Safe Drinking Water Hotline is open Monday through Friday, excluding Federal holidays, from 9 a.m. to 5:30 p.m. Eastern Time.

SUPPLEMENTARY INFORMATION: Affected Entities: Today’s determination and rule applies to owners or operators of any type of Class V well that is not a large-capacity cesspool or a motor vehicle waste disposal well, as described in the December 7, 1999 Class V Rule (64 FR 68546) at 40 CFR 144.81(2) and 144.81(16), respectively. The following table lists sub-classes and examples of entities that may have wells covered by this action. This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by, or interested in, this action. Other types of entities not listed in the table could also be interested. To determine whether your injection well is affected by this action, examine the applicability criteria in 40 CFR 144.1(g). If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples of entities potentially affected by this action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry and Commerce</td>
<td>Farms, animal feeding operations, and other agricultural sites that drain excess surface or subsurface water into wells; sites that have storm water drainage wells, facilities operating large-capacity septic systems, or nonhazardous waste disposal wells including disposal of byproducts from industrial operations; facilities that extract minerals from brine and then inject the spent brine underground; mines that backfill materials into mine shafts, pipelines, or other holes that are deeper than they are wide; aquaculture facilities that dispose of wastewater in underground wells; solution mines that use injection wells in the recovery of minerals from ore bodies that have already been conventionally mined; sites that use injection wells as part of aquifer remediation activities; geothermal power plants that reinject fluids into the ground; facilities that extract direct heat from geothermal fluids and then return those fluids underground; and sites that use “open-loop” heat pump/air conditioning systems</td>
</tr>
<tr>
<td>State and Local Government</td>
<td>Municipalities that use storm water drainage wells; publicly owned treatment works that inject sewage treatment effluent underground; and State and local government entities that inject water underground for the purpose of aquifer recharge or aquifer storage and recovery. Any Federal Agency that owns or operates one of the above types of wells</td>
</tr>
<tr>
<td>Federal Government</td>
<td></td>
</tr>
</tbody>
</table>

Table of Contents

I. Background
   A. Statutory and Regulatory Framework
   B. History of this Rulemaking
      1. 1987 Report to Congress
      2. 1994 Consent Decree with the Sierra Club
      3. 1995 Proposed Determination
      4. 1997 Modified Consent Decree
      5. 1998 Proposal and 1999 Final Rule
      6. 1999 Class V Study
      7. 2001 Proposal and Final Determination
   C. Requirements Applicable to Class V Wells

II. Description of Today’s Action
   A. Final Determination
   B. Public Comment
      1. Potential to Endanger
      2. Adequacy of Existing Regulation
      3. Effectiveness of Additional Federal UIC Regulations
      4. Data Used to Make the Determination
      5. Class V Sub-Class Specific Comments
      C. Amended Regulatory Language

III. Class V Program Management Plan
   A. Implementing Existing Regulations
      1. Long Standing UIC Regulations
      2. 1999 Class V Rule
   B. Educate Well Operators
   C. Explore Other Regulatory and Non-Regulatory Approaches
   D. Coordinate Efforts with Other EPA Programs
   E. Prepare for Future Actions

IV. Administrative Requirements
   A. Administrative Procedures Act
   B. Other Administrative Requirements
   V. References
I. Background

A. Statutory and Regulatory Framework

Class V wells are regulated under the authority of Part C of the Safe Drinking Water Act (SDWA or the Act) (42 U.S.C. 300h et seq.). The SDWA authorizes EPA to protect the quality of drinking water in the United States, and Part C specifically mandates the regulation of underground injection of fluids through wells. The Agency has promulgated a series of underground injection control (UIC) regulations under this authority.

Section 1421 of the Act requires EPA to propose and promulgate regulations specifying minimum requirements for effective State programs to prevent underground injection that may endanger drinking water sources. EPA promulgated administrative and permitting regulations, now codified in 40 CFR Parts 144 and 146, on May 19, 1980 (45 FR 33290), and technical requirements in 40 CFR Part 146 on June 24, 1980 (45 FR 42472). The regulations were subsequently amended on August 27, 1981 (46 FR 43156), February 3, 1982 (47 FR 4992), January 21, 1983 (48 FR 2938), April 1, 1983 (48 FR 14146), July 26, 1988 (53 FR 28118), December 3, 1993 (58 FR 63890), June 10, 1994 (59 FR 29958), December 14, 1994 (59 FR 64339), June 29, 1995 (60 FR 33926), and December 7, 1999 (64 FR 68546).

Section 1422 of the Act provides that States may apply to EPA for primary enforcement responsibility to administer the UIC program; States receiving such authority are referred to as “primacy States.” Where States do not seek this responsibility or fail to demonstrate that they meet EPA’s minimum requirements, EPA is required to prescribe a UIC program for such States by regulation. These direct implementation (DI) program regulations were issued in two phases on May 11, 1984 (49 FR 20138) and November 15, 1984 (49 FR 45308). For the remainder of this preamble, references to the UIC Program “Director” mean either the Director of the EPA program (where the program is implemented directly by EPA) or the Director of the primacy State program (where the State is responsible for implementing the program). Also, currently all UIC programs in Indian Country are directly implemented by EPA. Therefore, for the remainder of this preamble, references to DI programs include UIC programs in Indian Country.

B. History of This Rulemaking

1. 1987 Report to Congress

In accordance with the 1986 Amendments to the SDWA, EPA summarized information on 32 subclasses of Class V wells in a Report to Congress entitled Class V Injection Wells—Current Inventory; Effects on Ground Water; and Technical Recommendations, September 1987 (EPA 1987). This report presented a national overview of Class V injection practices and State recommendations for Class V well design, construction, installation, and siting requirements at that time. These State recommendations, however, did not give EPA a clear mandate on what, if any, additional measures were needed to control Class V wells on a national level. For any given type of well, the recommendations varied broadly and were rarely made by more than two or three States.

2. 1994 Consent Decree With the Sierra Club

On December 30, 1993, the Sierra Club filed a complaint in the United States District Court for the District of Columbia alleging that EPA failed to comply with section 1421 of the SDWA regarding publication of proposed and final regulations for Class V injection wells. The complaint alleged that EPA’s then current regulations regarding Class V wells did not meet the SDWA’s statutory requirements to “prevent underground injection which endangers drinking water sources.” (EPA 1994c).

To resolve the issue, EPA entered into a consent decree with the Sierra Club on August 31, 1994. This consent decree required that, no later than August 15, 1995, the Administrator sign a notice to be published in the Federal Register proposing regulatory action that fully discharged the Administrator’s rulemaking obligation under section 1421 of the SDWA with respect to those types of Class V injection wells determined to be high risk for which EPA did not need additional information. The Administrator was required to sign a final determination for these endangering Class V wells by no later than July 31, 1999. Short extensions were subsequently granted for both of these deadlines.

Second, by no later than September 30, 1999, EPA was required to complete a study of all Class V wells not included in the first rulemaking on endangering Class V injection wells. The information collected for the study was to be used as the basis for EPA’s determination on Class V wells not included in the Class V rule.

Third, by no later than April 30, 2001, the EPA Administrator was required to sign a notice to be published in the Federal Register proposing to discharge the Administrator’s rulemaking obligations under section 1421 of the SDWA with respect to all Class V injection wells not included in the first rulemaking for Class V injection wells. The Consent Decree required that the Administrator either: (1) Propose regulations fully implementing section 1421 with respect to all such Class V injection wells; (2) propose a decision certain wells using existing authorities and a Class V management strategy designed to speed up the closure of potentially endangering wells; and promote the use of best management practices to ensure that other Class V wells of concern did not endanger USDWs. Several factors led EPA to propose this approach: (1) The wide diversity in the types of fluids being injected, ranging from high risk to not likely to endanger; (2) the large number of facilities to be regulated; and (3) the nature of the regulated community, which is comprised largely of small businesses.

4. 1997 Modified Consent Decree

Based on public comments received on the 1995 proposal, EPA decided to reconsider its proposed approach. Because this reconsideration would extend the time necessary to complete the rulemaking for Class V wells, EPA and the Sierra Club entered into a modified consent decree on January 28, 1997 (EPA 1997) that extended the dates for rulemaking in the 1994 decree. The modified decree required three actions.

First, by no later than June 18, 1998, the EPA Administrator was required to sign a notice to be published in the Federal Register, proposing regulatory action that fully discharged the Administrator’s rulemaking obligation under section 1421 of the SDWA with respect to those types of Class V injection wells determined to be high risk for which EPA did not need additional information. The Administrator was required to sign a final determination for these endangering Class V wells by no later than July 31, 1999. Short extensions were subsequently granted for both of these deadlines.

Second, by no later than September 30, 1999, EPA was required to complete a study of all Class V wells not included in the first rulemaking on endangering Class V injection wells. The information collected for the study was to be used as the basis for EPA’s determination on Class V wells not included in the Class V rule.

Third, by no later than April 30, 2001, the EPA Administrator was required to sign a notice to be published in the Federal Register proposing to discharge the Administrator’s rulemaking obligations under section 1421 of the SDWA with respect to all Class V injection wells not included in the first rulemaking for Class V injection wells. The Consent Decree required that the Administrator either: (1) Propose regulations fully implementing section 1421 with respect to all such Class V injection wells; (2) propose a decision...
that no further rulemaking is necessary in order to fully discharge the Administrator's rulemaking obligations under section 1421 with respect to all such Class V injection wells; or (3) propose regulations fully implementing section 1421 with respect to some of these remaining Class V injection wells and propose a decision that no further rulemaking is necessary in order to fully discharge the Administrator's rulemaking obligations under section 1421 with respect to all other Class V injection wells not already covered. Finally, the Administrator must sign a final determination for these remaining Class V wells by no later than May 31, 2002.

5. 1998 Proposal and 1999 Final Rule

On July 29, 1998 (63 FR 40586), in response to the first action required under the modified consent decree with the Sierra Club, EPA proposed revisions to the UIC regulations that would add new requirements for three sub-classes of Class V wells that were believed to endanger USDWs. According to this proposal, Class V motor vehicle waste disposal wells in ground water protection areas (as defined in the rule) would either be banned, or would have to get a permit that required fluids released in those wells to not exceed the drinking water maximum contaminant levels (MCLs) and other health-based standards at the point of injection. Class V industrial waste disposal wells in ground water protection areas also would be required to not exceed the MCLs and other health-based standards at the point of injection, and large-capacity cesspools in such areas would be banned.

EPA received 97 letters from public commenters as well as recommendations from the National Drinking Water Advisory Council, which formed a Federal Advisory Committee Act (FACA) working group to address Class V UIC and Source Water Protection Program integration issues. This FACA workgroup met twice in 1999 to discuss the proposed Class V regulation. In addition, on May 21, 1999 (64 FR 27741), the Agency published a notice of data availability and further request for comment related to the 1998 proposal. A total of 14 public comment letters were received in response to this request.

Taking all the public input into account, EPA issued final revisions to the UIC regulations for Class V wells on December 7, 1999 (64 FR 68546). The final rule added new requirements for Class V waste disposal wells and large-capacity cesspools. Existing motor vehicle waste disposal wells in “ground water protection areas” and “other sensitive ground water areas” were banned with a provision that allows owners and operators of such wells to seek a waiver from the ban and obtain a permit ($144.88(b)). New Class V motor vehicle waste disposal wells and new and existing large-capacity cesspools were banned nationwide ($§§ 144.88(a) and (b)). If a State fails to complete their assessments of ground water protection areas or delineate other sensitive ground water areas by January 1, 2004, then all existing motor vehicle waste disposal wells in that State become subject to the new requirements. These new requirements are minimum Federal standards—primacy States may impose more stringent requirements. The final rule, however, did not adopt the proposed additional requirements for industrial waste disposal wells.

6. 1999 Class V Study

On September 30, 1999, in response to the second action required under the modified consent decree with the Sierra Club, EPA issued a study (EPA 1999a) of all Class V wells not included in the 1998 proposal (EPA 1998a). The Class V study consisted of two major components: (1) An information collection effort for the remaining universe of Class V wells, which was divided into 23 different sub-classes for the purpose of analysis; and (2) an “inventory modeling” exercise to estimate the number of storm water drainage wells and large-capacity septic systems, two types of wells that were believed to be quite prevalent, but for which adequate inventory information was particularly lacking.

As described in detail in Volume 1 of the Class V Study, the information collection effort consisted of a comprehensive literature search, State and EPA regional data collection, requests to the public for data, and peer review. As part of the study, EPA regional data collection, the Agency distributed nearly 700 questionnaires to EPA regions 5, 8, 9, and 10. The Agency supplemented the information from the questionnaires with follow-up telephone interviews and on-site file searches in 11 primacy States, 3 DI States, and 2 Regional Offices with DI States. The Agency also supplemented the survey results with visits to a number of injection well sites, including geothermal electric power well sites in California and food processing waste disposal well sites in Tennessee and Maine.

For the inventory modeling, EPA selected and visited 99 census tracts across the nation to collect data on the number of storm water drainage wells and large-capacity septic systems and factors that influence their prevalence. Storm water drainage wells were found in 22 of the 99 census tracts visited and large-capacity septic systems were found in 88 of the 99 census tracts visited. EPA used the data collected from the visits to develop mathematical models for predicting the number of these wells nationwide.

The Class V Study is available from the public docket, or at the EPA Web site http://www.epa.gov/safewater/uic/cl5study.html#volumes.

7. 2001 Proposal and Final Determination

As required by the Decree, EPA issued a proposed determination concerning the Class V wells not already addressed by the 1999 rule (66 FR 22971, May 7, 2001). In this determination, EPA proposed that further regulatory action for these wells was not necessary under section 1421. Today’s final determination, that no further rulemaking is necessary at this time, fulfills the last of the Agency’s obligations under the Class V Consent Decree.

C. Requirements Applicable to Class V Wells

The UIC regulations establish five classes of injection wells. Class I wells are used to inject hazardous and non-hazardous waste beneath the lowermost formation containing a USDW within one-quarter mile of the well bore. Class II wells are used to inject fluids associated with oil and natural gas recovery and storage of liquid hydrocarbons. Class III wells are used in connection with the solution mining of minerals from ore bodies that have not been conventionally mined. Class IV wells are used to inject hazardous or radioactive wastes into or above a formation that is within one-quarter mile of a USDW. Class IV wells are generally prohibited by 40 CFR 144.13. Class V wells are defined, in the regulations, as any well not included in Classes I through IV.

The 1999 Class V Rule added new requirements for existing motor vehicle waste disposal wells located in ground water protection areas and in other sensitive ground water areas delineated by the States; and new and existing large-capacity cesspools and new motor vehicle waste disposal wells nationwide.
All remaining Class V wells that are in compliance with the inventory and non-endangerment requirements are currently authorized by rule or by permit (§§144.24(a) and 144.84(a)). Rule authorization expires upon the effective date of a permit issued pursuant to §§144.25, 144.31, 144.33, or 144.34; upon meeting one of the conditions specified in §144.84(b); or upon proper closure of the well as described in §144.82(b).

In addition to these provisions, Class V UIC Program Directors have many obligations and authorities under the SDWA to ensure the protection of USDWs. Specifically, the current regulations subject Class V wells to the general statutory and regulatory prohibition against endangerment of USDWs, as well as some specific requirements. The prohibition against endangerment of USDWs, found in §§144.12 and 144.82, applies to all Class V wells and provides that no injection-related activity may be conducted “in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141 or may otherwise adversely affect the health of persons.” Sections 144.12(c), (d), and (e) prescribe mandatory and discretionary actions to be taken by the Director if a well is not in compliance with §144.12(a). These actions may include requiring the well operator to apply for a permit, ordering such action as may be necessary to prevent endangerment, taking an enforcement action, and/or taking an emergency action.

Also, owners or operators of Class V injection wells must submit basic inventory and assessment information under §144.26 and §144.83. In addition, Class V wells are subject to the general program requirements of §144.25 and §144.84 under which the Director may require an area, general or individual permit, if necessary, to protect USDWs. Moreover, under §144.27 and §144.83, EPA may require owners or operators of any Class V well, in EPA-administered programs, to submit additional information deemed necessary to protect USDWs. Owners or operators who fail to submit the information required under §§144.26, 144.27, or 144.83 are prohibited from using their injection wells. Lastly, §§144.12 and 144.82 give the UIC Program Director authority to close any Class V well that may endanger a USDW.

The above referenced sections represent the minimum Federal requirements for all Class V wells except motor vehicle waste disposal wells and large-capacity cesspools. The Federal requirements do not preclude a State or local government from promulgating more stringent requirements above and beyond the existing UIC authorities, and many States have additional requirements for sub-classes of Class V wells to prevent endangerment.

II. Description of Today's Action

A. Final Determination

Today, EPA is issuing its final determination that additional Federal underground injection control regulations for all sub-classes of Class V injection wells not included in the final rulemaking on motor vehicle waste disposal wells and large-capacity cesspools are not needed at this time to prevent Class V wells from endangering USDWs. The Agency based the determination on the potential for Class V wells to endanger USDWs and the anticipated effectiveness of additional Federal UIC regulation. The Agency will address its continuing statutory obligations by implementing existing authorities under the SDWA to protect USDWs from any threatening underground injection activities.

The determination addresses all of the Class V well types not covered by the 1999 final rule, in response to the third action required under the modified consent decree with the Sierra Club. It is important to clarify that this notice satisfies the Agency’s obligations under the modified consent decree with the Sierra Club, but it does not end EPA’s obligations, requirements, and actions to prevent Class V wells from endangering USDWs. As described in section I.C. above, UIC Program Directors have many obligations and authorities under the SDWA to ensure the protection of USDWs from potential risks posed by Class V wells. The Agency will continue to fulfill these obligations using existing authorities. In addition, nothing in this notice precludes a State or local government from promulgating requirements more stringent than the minimum Federal requirements. Also, today’s determination does not affect EPA’s authority to impose any necessary regulations in the future on any of the well types addressed in today’s notice. Today’s determination is limited to the requirements of section 1421 of SDWA as applied to Class V injection activities and does not limit in any way the Agency’s authorities or obligations under other statutes, such as the Clean Water Act.

B. Public Comment

The 2001 Proposed Determination (EPA 2001a) was open for public comment for 60 days. The Agency made the proposed determination widely available through direct mailing to stakeholders and posting the document on EPA’s Web site. Twenty-eight commentors addressed the proposal. EPA has developed a response to comment document (EPA 2002b) addressing all public comments received on the well types addressed by the proposed determination.

1. Potential To Endanger

The potential to endanger USDWs was the main criterion used for making the determination. EPA evaluated this potential based in large part on the record of documented incidents of ground water and other environmental contamination caused by the operation of the different Class V well types covered by the determination. Particularly given the length of time this program has been in existence, EPA believes that the absence of frequent, widespread, or significant cases of actual contamination is good evidence of a low potential for these wells to endanger. Therefore, additional Federal UIC regulation is not warranted at this time.

The majority of the commentors agreed with the Agency’s proposed determination that, based on the review of the Class V Study and additional information on industrial wells, Class V wells, as a class or sub-class, do not pose an endangerment to USDWs since documented cases of contamination attributable to these Class V wells are rare.

Some commentors disagreed with the Agency’s determination and raised both the potential for Class V wells to endanger and some limited cases in which sub-classes of Class V wells may have caused contamination.

The Agency agrees with the commentors that there is the potential for any Class V well to cause contamination. However, the Class V Study, the most rigorous and comprehensive data collection of Class V wells ever undertaken, did not show any evidence that Class V wells, as a well class, or any Class V sub-class, are contaminating USDWs. On the contrary, the lack of recent contamination data that links these Class V wells to ground water contamination supports EPA’s view that existing authorities are being used effectively to address any potential risk of these Class V wells endangering USDWs. While the data from the Class V Study did not support the need for
well-specific regulations, there were limited cases where Class V wells were found to be endangering. The Agency recognizes that some fluids may cause endangerment if injected directly into USDWs or into vadose zone materials which cannot adequately attenuate the injected fluids. The existing UIC regulations governing Class V injection wells provide UIC programs with sufficient authority to, on a case-by-case basis, prevent endangering injection practices and, where found to occur, stop them and compel the injection well owner/operator to take any restorative steps needed to prevent endangerment.

2. Adequacy of Existing Regulation

One commentor disagreed with the Agency’s determination that no additional regulations are needed at this time and contends that the SDWA requires EPA to develop additional minimum Federal requirements. That commenter believes the precautionary endangerment provision of the Act requires EPA to promulgate regulations unless it can show that no underground source of drinking water will be endangered.

EPA agrees with the commenter that the statutory definition of “endangerment” does not require contamination prior to taking action of either a regulatory or enforcement nature. That Congress intended for EPA to act in a preventive fashion—to establish regulatory requirements to prevent contamination of USDWs from injection wells, rather than just addressing such contamination after it occurs—is clear from the statutory definition of endangerment, its legislative history, and the language of section 1421.

However, EPA does not agree that the statute requires EPA to promulgate Class V regulations “unless EPA can show no endangerment will occur.” The requirement for establishing UIC regulations under SDWA section 1421 is that EPA must establish regulations to ensure that State programs “contain minimum requirements for effective programs to prevent underground injection which endangers drinking water sources * * *.” Because no amount of regulatory control will prevent all cases of contamination, EPA believes that a State may have an effective, preventative Class V program even though there may be isolated cases of endangerment. As a result, EPA does not agree that the statute requires EPA to prove the complete absence of contamination in order to determine that additional Federal regulations for Class V wells are unnecessary. Rather, EPA must determine whether, based on the existing information available to EPA, State programs are effective in regulating (i.e., preventing endangerment from) Class V wells, and if not, what Federal regulations, if any, could make such programs more effective. If the State programs are already effective, then additional Federal regulations are unnecessary.

If there is information showing that such wells, either a specific sub-class of Class V wells or Class V wells as a whole, are causing contamination or that there is some other specific, factual basis to determine that certain Class V well injection activities are likely to cause endangerments, then EPA may, in the future, determine that additional regulatory safeguards are necessary to prevent endangerment. EPA did establish additional requirements for Class V motor vehicle waste disposal wells and large-capacity cesspools in 1999 for this reason. EPA clearly does not need to wait for contamination to occur before determining that additional regulation of a sub-class or class of UIC wells is necessary.

3. Effectiveness of Additional Federal UIC Regulation

The second criterion EPA used to make this determination was the anticipated effectiveness of additional Federal UIC regulation. EPA used this criterion for only a few well sub-classes for which a sound determination could not be based on the potential to endanger alone, and includes agricultural drainage wells, industrial waste disposal wells, and sewage treatment effluent wells. In evaluating the anticipated effectiveness of additional regulation, EPA considered such factors as the degree to which additional Federal UIC regulations would simply duplicate existing State programs without increasing the “effectiveness” of these programs. While the Agency also considered the possibility of the UIC program joining forces with other existing or emerging programs to achieve greater results in an integrated fashion, it did not use the existence of other Federal programs that also address Class V wells as a basis for deciding against additional UIC regulation.

The majority of the commentors agreed that there was adequate authority to manage Class V wells and additional Federal regulation is unnecessary. A few commentors believed the SDWA would not allow for the use of anticipated effectiveness of additional Federal regulation. They contend that the SDWA was not intended nor the authority to limit the protection afforded to all USDWs by restricting its scope to regulations which are proven a priori to be effective. Rather, Congress’ concern is with any activity which may endanger USDWs, and is not limited to those activities for which a regulatory program has been proven effective. EPA agrees that Congress intended for all injection to be regulated, and notes that the UIC Program does regulate all injection wells. However, EPA disagrees with the commenter that the effectiveness of additional Federal regulations cannot be a criterion for determining whether to establish more prescriptive regulations for Class V wells. The statutory obligation is for EPA to determine whether State UIC programs are effective in addressing endangerments to USDWs, and to establish minimum requirements for such programs if they are not effective. As a result, the effectiveness of State programs, and additional Federal regulations, is very much a relevant criterion under section 1421. The statutory obligation to establish additional UIC requirements is not triggered solely by finding that some wells may be or have been an “endangerment” as defined by the statute. EPA agrees that the term “endangerment” is broadly defined and preventive. Section 1421 is also preventative. However, the issue is not whether there are, or might be, some instances of endangerment, but rather whether additional Federal requirements are necessary to ensure effective State programs to prevent these endangerments. If Federal regulations would not improve the effectiveness of State programs, then such regulations are not required under section 1421. The statutory obligation is to determine whether State programs are ineffective in addressing endangerment; EPA does not have information at this time that indicates that State programs are ineffective in addressing endangerments from Class V wells.

4. Data Used To Make The Determination

The determination was based on information collected by the Class V Study and industrial waste disposal well information collected to support the Class V Proposed Rule. The Class V Study was designed and implemented to obtain all information that was currently available on Class V wells. The Class V Study represents the most comprehensive collection of information on Class V wells. The majority of the commentors referred to the Class V Study data to support their argument either for or against the determination. However, a few
commentors indicated that there was information that was not included in the Class V Study, but it was not submitted as part of the comments. As part of EPA’s obligation to prevent Class V wells from endangerment, we will continue to evaluate whether additional Federal regulations or other actions are warranted as more information becomes available. We encourage anyone with information to submit it for consideration.

b. Areas Not Covered by the Class V Study

Some commentors encouraged the Agency to expand the scope of the Class V Study to include data collection on: ground water monitoring; the fate of viruses, chemicals and their metabolites in the subsurface; and, additional subclasses of Class V wells such as horizontal drain fields and abandoned drinking water wells that were not addressed in the Study. While the Agency has no plan to expand upon the existing Class V Study, we will continue to collect information and evaluate the potential for Class V wells to endanger USDWs. The Class V Study is a firm starting point to assist the Agency, and our stakeholders, in prioritizing future efforts such as public outreach, guidance development, data collection, and, if needed, rule development.

A few commentors raised concerns about “emerging” issues such as pharmaceutical and personal care products (PPCPs). PPCPs were not considered as part of the Class V Study. EPA has no knowledge of any contamination linked to PPCP, nor did anyone comment on the need to address PPCPs when the Class V Study design was public noticed. This may be because, until recently, little information was available on PPCPs and analytical techniques lacked the sensitivity to identify PPCPs in water. The United States Geological Survey (USGS) recently released data on PPCPs in streams downstream from areas of intense urbanization and animal production. Additional data on ground water sampling will be released later this year followed by data on drinking water source water. EPA has been, and will continue to, work with the USGS as more information becomes available and will assess the relevance of the information to Class V activities.

5. Class V Sub-Class Specific Comments

As stated above, today’s Notice of Final Determination for Class V Wells continues to use the two main criteria proposed in 1991—the potential to endanger USDWs and the anticipated effectiveness of additional Federal regulation—to determine whether Class V wells warrant additional regulations at this time.

EPA continues to believe that the potential to endanger USDWs is the more important of the two criteria, given the SDWA mandate to prevent endangerment. EPA also believes that the scarcity of documented cases of soil or ground water contamination due to Class V wells demonstrates a low potential for these wells to endanger. EPA recognizes that there may be isolated instances of endangerment to USDWs which have not been documented. However, the Class V Study, which was a thorough and comprehensive review of all available data on these wells, did not document significant or widespread cases of contamination. EPA believes that most, if not all, cases of significant or widespread contamination due to Class V wells would have been reported in some manner and, as a result, would have been identified and documented as part of the Class V Study. As a result, the relative paucity of such documentation is viewed by EPA as a good indication that the existing regulations are adequate.

The degree to which additional Federal UIC regulations would simply duplicate existing State program efforts without increasing their “effectiveness” is a key factor in evaluating the usefulness of additional regulations. The scarcity of documented cases of contamination and the existence of effective State UIC programs signifies that additional Federal UIC regulations are not necessary, at this time, under the statute.

The Agency received specific comments on agricultural drainage wells, aquifer remediation wells, aquifer storage and recovery wells, geothermal wells, industrial wells, salt water intrusion wells, spent brine return flow wells, storm water drainage wells, and sewage treatment effluent wells. Many of the commentors agreed with the Agency’s determination that additional regulations were not needed for any of the sub-classes covered by the determination. The remaining commentors disagreed with the Agency. However, these commentors did not submit evidence of any contamination cases that had not been effectively addressed by UIC Programs using existing authorities. EPA believes that additional Federal regulation is not necessary where the endangerment posed by particular well types appears to be rare. The fact that few documented cases of endangerment were found, and that the endangerment was addressed using current authorities, supports EPA’s determination that existing Federal regulations and State programs are effective to prevent endangerment. EPA does not believe that additional regulations for these wells should be promulgated based upon conjecture about endangerments that could occur or some kind of “presumption” that they do occur absent a showing otherwise. EPA does recognize that fluids injected into shallow injection wells can exceed human health-based thresholds. However, the information available to the Agency shows that existing Federal regulations provide EPA and primary States with the authority needed to ensure that shallow injection wells are properly situated, constructed, operated, maintained and (if necessary) closed in a manner that protects underlying USDWs.

There is no information necessitating additional Federal UIC regulations for these wells, at this time. The current record demonstrates that existing regulations already effectively prevent many cases of endangerment and provide sufficient authority to address rare cases of endangerment that might occur.

Detailed responses to comments submitted on specific sub-classes of Class V wells are found in the response to comment document (EPA 2002b).

C. Amended Regulatory Language

Today’s action fulfills the Agency’s obligation in regard to Class V wells as stated in section 1421 of the Safe Drinking Water Act. Therefore, EPA is amending its UIC regulations at 40 CFR part 144.1, purpose and scope, to remove the sentence “Class V wells will be inventoried and assessed and regulatory action will be established at a later date.” In addition, some minor changes were made to correct mistakes and omissions within the CFR. In two places within part 144 references to the location of primary drinking water standards within the CFR has been corrected to read 40 CFR part 141, instead of part 142. Section 144.1 also references §146.04 as containing criteria for “aquer exemptions.” This reference has been corrected to read §146.4. In correcting §144.1, we’ve also removed an incorrect reference to “individual” permits. Also, as part of the 1999 Class V rule (EPA 1999c) States were allowed to authorize Class IV injection under certain conditions. Section 144.23 Prohibition of Class IV wells was amended at that time, but parallel language in §144.13 was not. This rulemaking corrects the regulatory language at §144.13 to be consistent with the language at §144.23. The regulatory language at §144.26 is
amended to remove introductory text that references paragraph (e) of the regulation that was removed as part of the 1999 Class V rule (EPA 1999c).

Lastly, paragraph (g) at § 144.87 has been inserted and reserved. The original regulatory language that was added to the CFR as part of the 1999 Class V rule (EPA 1999c) omitted paragraph (g), so it is being added and reserved to avoid confusion and for consistency.

III. Class V Program Management Plan

As part of an ongoing obligation to prevent Class V wells from endangering USDWs, the Agency has developed a management plan for Class V wells. The purpose of the management plan is to prioritize resources and activities, as well as identify, for our stakeholders, how best to achieve our common goal of preventing Class V wells from endangering USDWs. The following areas have been prioritized for future activities.

A. Implementing Existing Regulations

1. Long Standing UIC Regulations

An important first step in the prevention of ground water contamination from injection wells is to ensure that Class V well owners and operators know they have a Class V well and what their obligations are under the UIC regulations. The UIC Program will continue to collect inventory information, conduct inspections, educate facility owners and operators on their obligations under the UIC regulations and assess the facilities injection practices. The outcome of any given assessment may be authorization by rule, a request for additional information, requiring the facility to apply for a general, area, or site specific permit, or requiring closure of the well.

To enhance inventory and inspection information, the UIC program has begun a pilot project in some direct implementation States. The inventory/inspection initiative will initially focus on source water protection areas and then expand to other priority areas.

EPA, State and local inspectors will also be looking for facilities that may be operating Class IV wells which are banned under UIC regulations. These hazardous waste disposal wells would be subject to immediate closure that may include site characterization, cleanup and enforcement penalties.

The Agency also plans to develop technical assistance documents. In particular, guidance is being developed to help assist UIC Programs determine if, on a case-by-case basis, an industrial well should be rule authorized, permitted or closed. A Class V industrial waste disposal well closure guidance will also be developed to give general, performance based guidance.

In addition to the technical guidance, EPA is considering the development of compliance guides to assist owners and operators in complying with existing regulations.

2. 1999 Class V Rule

Motor vehicle waste disposal wells and large-capacity cesspools were identified as having a high potential to endanger USDWs and required additional regulations to insure they do not endanger USDWs. As such, the Agency sees the implementation of the Class V Rule as a high priority. The Class V Rule requires owners and operators of existing motor vehicle waste disposal wells in regulated areas to close their well, or if applicable, obtain a permit. These requirements are being phased in through 2008. Owners and operators of large-capacity cesspools must close their cesspools by April 5, 2005. EPA will coordinate its efforts with primacy States and State and local health departments to implement the ban.

B. Educate Well Operators

Full compliance with Class V regulations requires that well operators understand their obligations. Owners and operators of Class V wells must meet certain regulatory requirements: large-capacity cesspools must close; motor vehicle waste disposal wells in regulated areas must close or obtain a permit; and, all other well owners must submit inventory information about their well to the UIC Program. Well owners and operators can not inject until they have submitted inventory. For the wells covered by this determination, the minimum Federal requirement is the well cannot endanger USDWs. As discussed in section I.C., UIC Program Directors have the authority to impose additional requirements as needed. In addition, States can, and in many cases do, choose to be more stringent.

The UIC Program has developed some outreach materials outlining what the various requirements are, and how owners and operators must comply. These include:

—UIC Program poster—“Protecting Public Health and Drinking Water” (EPA 2001b).
—UIC Booklet—“Protecting Public Health through Underground Injection Control” (EPA 2002a).
—Videos—“The Problem with Shallow Disposal Systems” and “Shallow Disposal Systems Are Everyone’s Business”.

Anyone interested in obtaining any of these materials should contact the Safe Drinking Water Hotline at (800) 426–4791. Additionally, most Regional and State UIC programs have the type of specific compliance information needed by injection well owners/operators, or the phone numbers of who to contact for such information, available on their Web sites. Hot-links to each of these Web sites can be accessed through the general EPA UIC program Web site listed above.

C. Explore Other Regulatory and Non-regulatory Approaches

The UIC Program will explore both new regulatory and innovative non-regulatory approaches to manage Class V wells. One new regulatory approach that EPA will consider is the use of general permits. General permitting is an existing authority that has not been widely utilized by the UIC Program, where like facilities within a defined area can be covered by one permit. A growing concern expressed by commentors, States, and EPA Regions, is that there will be a dramatic increase in the use of Class V wells to dispose of storm water rather than obtain NPDES permits for surface discharge. This is an example where general permits may be utilized. Additionally, in sensitive geologic areas, a general permit could be used to require specific best management practices as well as injectate monitoring.

The Agency is also exploring non-regulatory approaches to prevent contamination of USDWs, such as, the use of voluntary compliance standards. The Agency will work with well owners and operators, on a case-by-case basis to identify opportunities to implement voluntary waste minimization practices. These voluntary practices may ensure that facility injection practices do not contaminate USDWs. This would be an alternative to imposing permit conditions.

D. Coordinate Efforts With Other EPA Programs

The UIC Program is currently working with the Office of Wastewater Management (OWM) to coordinate efforts on large-capacity septic systems and storm water drainage. The Onsite Decentralized Wastewaters: The Management voluntary guidelines (to be finalized in the summer of 2002) include
information about the UIC Program, as well as the standards Class V large-capacity septic systems must meet under the UIC program. The OWM Speakers Bureau includes UIC Personnel to assist in giving presentations and providing outreach documents to State and local health department personnel, communities, utilities and other stakeholders.

The UIC Program will continue to coordinate efforts with the National Pollutant Discharge Elimination System (NPDES) program to ensure that the regulated community understands their obligations under the UIC Program and that any storm water discharges to injection wells do not have the potential to endanger USDWs.

In addition, the UIC program is working closely with other programs such as the EPA’s Engineering and Analysis Division in the Office of Water to collect additional information on industrial operations. The Metals Products and Machinery effluent limitations guideline, which was proposed last Fall, includes information on the UIC program. Lastly, the UIC Program will be working with other offices to develop industry specific voluntary consensus standards where appropriate.

E. Prepare for Future Actions

In the course of our ongoing activities, EPA will continue to work with States, regulated entities, environmental organizations, and other sources, to collect and evaluate data on Class V wells and their potential risks. We will use that information to reevaluate on a regular basis the need for additional regulation. If at any point new data indicates that a sub-class of Class V wells may pose an endangerment, the Agency will develop a plan to collect and analyze well sub-class specific information to determine what additional regulation may be required. Data collection and further analysis could take the form of ground water monitoring, injectate sampling or risk assessment modeling.

In addition, there are some “emerging” issues, such as pharmaceutical and personal care products (PPCPs), that were not identified for inclusion in the Class V Study, but warrant ongoing involvement by the UIC Program. The Agency will continue to coordinate efforts with the USGS and other researchers doing work related to ground water protection. The UIC Program will continue to assess any new information that relates to endangerments from Class V injection wells.

Today’s determination does not preclude future action under EPA’s UIC authority if the agency determines that additional regulatory action is needed.

IV. Administrative Requirements

A. Administrative Procedure Act

Section 553 of the Administrative Procedure Act, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing prior notice and an opportunity for public comment. EPA is publishing several rule changes related to today’s final determination. First, EPA is removing regulatory text that states that EPA will establish regulatory requirements for Class V wells at a later date because EPA has completed its determination of whether such regulatory requirements are necessary. As a result, such language is now outdated. Second, EPA is correcting minor errors in the existing Class V regulations. EPA has determined that there is “good cause” for making today’s rule changes final without prior proposal and opportunity for comment because these rule changes have no substantive impact and merely correct or replace outdated CFR text. Thus, notice and public procedure are unnecessary. EPA finds that this constitutes “good cause” under 5 U.S.C. 553(b)(B). For the same reasons, EPA is making these rule changes effective upon publication. 5 U.S.C. 553(d)(3).

B. Other Administrative Requirements

Today’s rule merely removes outdated CFR text and corrects minor errors. Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is not a “significant regulatory action” and is therefore not subject to review by the Office of Management and Budget. Because the Agency has made a “good cause” finding that this action is not subject to notice-and-comment requirements under the Administrative Procedures Act or any other statute in section IV.A., it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) or to sections 202 or 205 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). In addition, this action does not significantly or uniquely affect small governments or impose a significant intergovernmental mandate, as described in sections 203 and 204 of UMRA. This rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13175 (65 FR 67249, November 6, 2000). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant. Neither is it subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because the rule is not an significant regulatory action under Executive Order 12866. This technical correction does not include technical standards; thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

The Congressional Review Act (5 U.S.C. 801 et seq.), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that the notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefor, and established an effective date of June 7, 2002. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. section 804(2).

V. References

EPA. 1980a. Consolidated Permit Regulations: RCRA Hazardous Waste; SDWA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration; Final Rule. 45 FR 33290, May 19, 1980.

EPA. 1980b. Water Programs; Consolidated Permit Regulations and Technical
Criteria and Standards; State Underground Injection Control Programs; Final Rule for Part 146 and Amendments to Part 122. 45 FR 42472, June 24, 1980.


EPA. 1983b. Environmental Permit Regulations; RCRA Hazardous Waste; SDWA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration; Final Rule. 48 FR 14146, Apr. 1, 1983.


List of Subjects 40 CFR Part 144

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Indians-lands, Reporting and recordkeeping requirements, Surety bonds, Water supply.


G. Tracy Mehlan III, Assistant Administrator of Water.

For the reasons set out in the preamble, title 40 chapter I of the Code of Federal Regulations is amended to read as follows:

PART 144—UNDERGROUND INJECTION CONTROL PROGRAM

1. The authority citation for part 144 continues to read as follows:


2. Section 144.1 is amended by revising paragraph (g) introductory text to read as follows:

§144.1 Purpose and scope of part 144.

(g) Scope of the permit or rule requirement. The UIC Permit Program regulates underground injections by five classes of wells (see definition of “well injection,” § 144.3). The five classes of wells are set forth in § 144.6. All owners or operators of these injection wells must be authorized either by permit or rule by the Director. In carrying out the mandate of the SDWA, this subpart provides that no injection shall be authorized by permit or rule if it results in the movement of fluid containing any contaminant into Underground Sources of Drinking Water (USDWs—see § 144.3 for definition), if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 141 or may adversely affect the health of persons (§ 144.12). Existing Class IV wells which inject hazardous waste directly into an underground source of drinking water are to be eliminated over a period of six months and new such Class IV wells are to be prohibited (§ 144.13). For Class V wells, if remedial action appears necessary, a permit may be required (§ 144.25) or the Director must require remedial action or closure by order (§ 144.12(c)). During UIC Program development, the Director may identify aquifers and portions of aquifers which are actual or potential sources of drinking water. This will provide an aid to the Director in carrying out his or her duty to protect all USDWs. An aquifer is a USDW if it fits the definition, even if it has not been “identified.” The Director may also designate “exempted aquifers” using the criteria in 40 CFR 146.4. Such aquifers are those which would otherwise qualify as “underground sources of drinking water” to be protected, but which have no real potential to be used as drinking water sources. Therefore, they are not USDWs. No aquifer is an “exempted aquifer” until it has been affirmatively designated under the procedures in § 144.7. Aquifers which do not fit the definition of “underground source of drinking water” are not “exempted
aquifers.” They are simply not subject to the special protection afforded USDWs.

3. Section 144.13 is amended by revising paragraph (c) to read as follows:

§ 144.13 Prohibition of Class IV wells.

(c) Wells used to inject contaminated ground water that has been treated and is being reinjected into the same formation from which it was drawn are not prohibited by this section if such injection is approved by EPA, or a State, pursuant to provisions for cleanup of releases under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601–9657, or pursuant to requirements and provisions under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 through 6987.

4. Section 144.26 is amended by revising the introductory text and removing the text after the heading in paragraph (d) introductory text to read as follows:

§ 144.26 Inventory requirements.

The owner or operator of an injection well which is authorized by rule under this subpart shall submit inventory information to the Director. Such an owner or operator is prohibited from injecting into the well upon failure to submit inventory information for the well within the time frame specified in paragraph (d) of this section.

(d) Deadlines. (1) *

§ 144.31 Does this subpart apply to me?

(16) Motor vehicle waste disposal wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work. Fluids disposed in these wells may contain organic and inorganic chemicals in concentrations that exceed the maximum contaminant levels (MCLs) established by the primary drinking water regulations (see 40 CFR part 141). These fluids also may include waste petroleum products and may contain contaminants, such as heavy metals and volatile organic compounds, which pose risks to human health.

§ 144.87 [Amended]

6. Section 144.87 is amended by adding and reserving paragraph (g).