



# State Implementation Guide

## Revisions to the Underground Injection Control Regulations for Class V Injection Wells

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**APPENDICES**

- Appendix A Final Class V Rule with the preamble (64 FR 68546).
- Appendix B Fact Sheet to the Rule.
- Appendix C Frequently Asked Questions. *[Under review.]*
- Appendix D Sample Permit Application Form.
- Appendix E Sample EPA Pre-closure Notification Form.
- Appendix F Sample EPA Inventory Form.
- Appendix G Training Presentation Materials for the Rule.
- Appendix H National Primary Drinking Water Standards.
- Appendix I *Best Management Practices for the Protection of Ground Water: A Local Official's Guide to Managing Class V UIC Wells* by Connecticut Department of Environmental Protection.
- Appendix J Glossary.

## INTRODUCTION

### A. Purpose of this Implementation Guide

This guide has been developed to assist States and EPA Regions in implementing the “Class V Rule” (*Revisions to the Underground Injection Control Regulations for Class V Injection Wells*, 64 FR 68546).

The Safe Drinking Water Act (SDWA) provisions and EPA regulations described in this document contain legally binding requirements. This document does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA and State decision makers retain the discretion to adopt approaches on a case by case basis that differ from this guidance where appropriate. Any decisions regarding a particular facility will be made based on the applicable statutes and regulations. Therefore, interested parties are free to raise questions and objections about the appropriateness of the application of this guidance to a particular situation, and EPA will consider whether or not the recommendations or interpretations in the guidance are appropriate in that situation. EPA may change this guidance in the future.

The Class V Rule contains the minimum Federal requirements. The material in this guide is not binding. Where rule requirements are presented, the words “must” or “shall” are used followed by the regulatory citation. Where it is recommended or guidance, the words “should” or “may” are used.

### B. Safe Drinking Water Act and Underground Injection Control

Underground injection wells are regulated by the underground injection control (UIC) program under the authority of Part C of the SDWA (42 U.S.C. 300h *et seq.*). The SDWA is designed 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. EPA has promulgated a series of UIC regulations under this authority.

Section 1421 of the SDWA requires EPA to propose and promulgate regulations specifying minimum requirements for State programs to prevent underground injection that endangers drinking water sources. EPA promulgated administrative and permitting regulations, codified in 40 CFR parts 144 and 146, on May 19, 1980, and technical requirements in 40 CFR part 146 on June 24, 1980. The regulations were subsequently amended in 1981, 1982, 1983, 1988, 1993, 1994, and 1995.

Section 1422 of the SDWA 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.” A State or Tribe must adopt regulations (40 CFR parts 145) that meet the minimum Federal

requirements (as codified at 40 CFR parts 144 and 146) to assume primary responsibility for the UIC program. A State's program can always be more stringent than the minimum Federal requirements. EPA is required, by Statute and regulation, to prescribe and directly implement a UIC program for States and Tribes that do not seek this responsibility or fail to demonstrate that they meet EPA's minimum requirements. EPA administered programs are referred to as Direct Implementation (DI) Programs. For Class V wells, there are currently 37 Primacy programs (including three Territories) and 19 DI programs (including three Territories). All Class V UIC programs in Indian Lands are directly implemented by EPA.

### **C. EPA's Strategy for Class V Wells**

Class V injection wells<sup>1</sup> are generally shallow waste disposal wells used to release fluids either directly into underground sources of drinking water (USDWs) or into the shallow subsurface that overlies USDWs.<sup>2</sup> Class V wells are authorized to inject only non-hazardous wastes.

Class V wells are located in virtually every State, especially in unsewered areas where the population is likely to depend on onsite waste disposal for their wastewater and ground water withdrawal for their drinking water. Frequently, these wells are designed as no more than shallow low-tech systems, such as drywells<sup>3</sup> or septic tank and leachfield combinations intended for sanitary waste disposal. While such designs may be adequate for draining domestic wastewater or the isolation and treatment of sanitary waste, they are not designed for the disposal of other fluids, such as the chemicals associated with motor vehicle waste disposal wells.

Under the Federal regulations, all Class V wells (with the exception of large capacity cesspools and motor vehicle waste disposal wells that are specifically addressed by the Class V Rule) are "authorized by rule" (40 CFR 144.24). This means they are allowed to inject if they comply with the UIC program requirements. The most important of these requirements is that Class V wells are not allowed to endanger.

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<sup>1</sup> Class I wells are used to inject wastes beneath the lowermost geologic formation that contain an underground source of drinking water (USDW). Class II wells are used to inject fluids associated with oil and natural gas recovery and the storage of liquid hydrocarbons. Class III wells are associated with mining and the extraction of minerals such as uranium, copper, and salts. Class IV wells are used to inject hazardous or radioactive waste into or above USDWs, and they are generally banned. Any well that is not included in Classes I through IV, as defined in 40 CFR 144.6 and 40 CFR 144.80, is generally considered a Class V well.

<sup>2</sup> An underground source of drinking water (USDW) is an aquifer or a portion of an aquifer that supplies any public water systems or contains a sufficient quantity of ground water to supply a public water system; currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids; and is not an exempted aquifer (i.e., exempted from UIC regulations).

<sup>3</sup> A drywell is a bored, drilled or driven shaft or a dug hole whose depth is greater than its largest surface dimension, which is completed above the water table so that its bottom and sides are typically dry except when receiving fluids.

Non-endangerment means that injection operations must not allow fluid containing any contaminants to move into USDWs where the presence of the contaminants may cause violations of primary drinking water regulations or adversely affect public health (40 CFR 144.12).

On November 23, 1999, the EPA Administrator signed a regulation that addresses two specific types of Class V wells: motor vehicle waste disposal wells and large-capacity cesspools. In addition, EPA completed a study of all other Class V wells and published a notice on September 30, 1999 regarding the availability of the study.

Based on information gathered during the Class V well study, EPA is working on the next phase of its strategy to address the remaining Class V wells. EPA is under a consent order to propose to discharge the Administrator's rulemaking obligations with respect to all Class V well types by April 2001 and finalize these rules by May 31, 2002.

#### **D. State Source Water Assessment and Protection Programs**

The 1996 Amendments to the SDWA establish source water protection as a national priority. Source waters consist of underground aquifers or surface water bodies from which one or more public water systems (PWSs)<sup>4</sup> receive supplies of drinking water. The Amendments provide requirements and incentives for States to assess their source waters, including the susceptibility of PWSs to contamination, and to establish State Source Water Assessment and Protection Programs that fit their particular needs and conditions. All 50 States have submitted their plans to EPA and a majority of them have received approval to begin their Programs.

#### **E. Summary of the Revisions to the UIC Regulations for Class V Injection Wells (The Class V Rule)**

The Revisions to the UIC Regulations for Class V Injection Wells, referred to in this guidance as the "Class V Rule," adds new requirements for two categories of Class V wells to ensure protection of USDWs:

- C ***Motor vehicle waste disposal wells.*** These are drywells or septic tank and leachfield combinations *"that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop,*

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<sup>4</sup> A public water system (PWS) is a water system that provides water to the public for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves at least 25 individuals.

*new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work.<sup>5</sup> 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.”*

- C ***Large-capacity cesspools.*** Cesspools are typically drywells that “*receive untreated sanitary waste, containing human excreta, which have an open bottom and sometimes perforated sides. The UIC requirements do not apply to single-family residential cesspools or to non-residential cesspools that receive solely sanitary waste and have the capacity to serve fewer than 20 persons a day.*”

The Class V Rule bans new motor vehicle waste disposal wells and new and existing large-capacity cesspools nationwide. The Rule also bans existing motor vehicle waste disposal wells in ground water protection areas and other sensitive ground water areas but includes a waiver provision that will allow well owners and operators to seek permission to operate their wells under specified minimum permit conditions. For the purpose of the Class V Rule, ground water protection areas are source water protection areas delineated in accordance with the 1996 SDWA Amendments for community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) that use ground water as a source.<sup>6</sup> Other sensitive ground water areas are areas delineated by States that are critical for the protection of USDWs.

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<sup>5</sup> Vehicles include automobiles, motor vehicles include trucks, trains, boats, motor cycles, farm machineries, airplanes, and recreation vehicles such as snow mobiles, all terrain vehicles, and jet skis.

<sup>6</sup> Community water systems (CWSs) are public water systems that serve at least 15 service connections used by year-round residents of the area or regularly serve at least 25 year-round residents. Non-transient non-community water systems (NTNCWSs) regularly serve at least 25 of the same persons per day for more than 6 months per year. NTNCWs typically are schools, offices, churches, and factories. The third kind of public water systems, namely transient non-community water systems (TNCWSs), does not regularly serve 25 of the same persons per day for over 6 months per year. TNCWSs typically are restaurants, hotels, and large stores.

Revisions to the UIC Regulations for Class V Injection Wells (The Class V Rule) focus on:

- Two categories of Class V wells
  - < Motor vehicle waste disposal wells
    - Nationwide ban of new wells
    - Ban of existing wells in ground water protection areas and other sensitive ground water areas with provision to seek a waiver from the ban and obtain a permit
  - < Large-capacity cesspools
    - Nationwide ban of new and existing wells
- Integration of UIC regulations with source water assessment and protection programs

The new requirements of the Class V Rule are summarized in Table I.1 along with their locations in the new Subpart G and the relevant sections in this Implementation Guide.

Table I.1 - New Class V Rule Requirements

New Class V Rule Requirements	Federal Citation (40 CFR 144 Subpart G)	Section in Guidance
Ban of new large-capacity cesspools by April 5, 2000	40 CFR 144.84(b)(2) 40 CFR 144.88(a)(2)	2.B.1 3.B
Ban of new motor vehicle waste disposal wells by April 5, 2000	40 CFR 144.84(b)(2) 40 CFR 144.88(b)(2)	2.B.2 5.B
Closure of all existing large-capacity cesspools by January 1, 2005	40 CFR 144.88(a)(1)(i)	2.B.1 3.C
Well closure or obtain a waiver from the ban for motor vehicle waste disposal wells located in ground water protection areas	40 CFR 144.84(b)(2) 40 CFR 144.87(a) and (b) 40 CFR 144.88(b)(1)(i)	2.B.2 6.A 6.C
Applicability of the Rule to motor vehicle waste disposal wells in <u>new</u> ground water protection areas (assessed after the initial deadline)	40 CFR 144.87(e) 40 CFR 144.88(b)(1)(i)	6.B
Statewide application of the Rule to all motor vehicle waste disposal wells in States that fail to complete local assessments for ground water protection areas	40 CFR 144.87(b) 40 CFR 144.88(b)(1)(v)	6.D 6.E
Well closure or obtain a waiver from the ban for motor vehicle waste disposal wells located in other sensitive ground water areas	40 CFR 144.84(b)(2) 40 CFR 144.87(a) and (c) 40 CFR 144.88(b)(1)(ii)	7.A 7.B
Statewide application of the Rule to all motor vehicle waste disposal wells in States that fail to complete delineation of other sensitive ground water areas	40 CFR 144.87(c) 40 CFR 144.87(b)(vi)	7.C 7.D
Statewide application of the Rule to all motor vehicle waste disposal wells in States that determine not to designate other sensitive ground water areas	40 CFR 144.87(f) 40 CFR 144.88(b)(vi)	8.A 8.B
Application of existing authorities outside of ground water protection areas and other sensitive ground water areas	40 CFR 144.87(h)	3.D 5.D
Pre-closure notification at least 30 days prior to well closure of large-capacity cesspool and motor vehicles waste disposal wells	40 CFR 144.88(a)(1)(ii) 40 CFR 144.88(b)(1)(vii)	3.C.1 5.C.1
Closure of large-capacity cesspools and motor vehicle waste disposal wells	40 CFR 144.89(a) 40 CFR 144.82(b)	3.C.2 5.C.2
Permit conditions and monitoring requirements for motor vehicle waste disposal wells	40 CFR 144.88(b)(1)(iii) and (iv)	5.C.3 5.C.4
Conversion of motor vehicle waste disposal wells to other Class V well type	40 CFR 144.89(b)	5.E.2
Reclassification of radioactive waste disposal wells	40 CFR 146.5	9.A
Rule authorization of Class IV wells under the Comprehensive Environmental Response, Compensation, and Liability Act and Resource Conservation and Recovery Act (EPA and States)	40 CFR 144.23(c)	9.B
Plugging and abandoning Class V wells (closure)	40 CFR 146.10(c)	9.C
New and expanded definitions	40 CFR 146.3	9.D

## **F. Scope of this Implementation Guide**

This implementation guide was developed through a workgroup process involving EPA Headquarters and Regions. It was distributed and used at the ten State Implementation Training Workshops. This latest version of the guide has been revised and updated based on feedback and comments from participants of the State implementation training workshops, other State and EPA UIC and drinking water program staff, and various stakeholder organizations. The guide contains the following sections:

- Section 1 summarizes the minimum Federal requirements for all Class V wells, which are not part of the new Class V Rule.
- Section 2 presents the general time frame associated with the Class V Rule.
- Section 3 presents the requirements and implementation time line for large-capacity cesspools.
- Section 4 addresses the State Source Water Assessment and Protection Program mandated under the SDWA Amendments of 1996, as it relates to the Class V Rule.
- Section 5 focuses on the requirements associated with motor vehicle waste disposal wells.
- Section 6 presents the implementation time line for motor vehicle waste disposal wells as associated with the assessments of ground water protection areas.
- Section 7 presents the implementation time line for motor vehicle waste disposal wells as associated with the delineation of other sensitive ground water areas.
- Section 8 presents the implementation time line for motor vehicle waste disposal wells in States that decide to apply the Class V Rule statewide.
- Section 9 covers other changes contained in the Class V Rule, which are not specifically related to motor vehicle waste disposal wells and large-capacity cesspools.

The Appendices of this document also provide information that will be useful to States and EPA Regions throughout the primacy revision application process.

- Appendix A contains the published Class V Rule, along with the Preamble to the Rule (64 FR 68546).
- Appendix B contains the Rule fact sheet.

- Appendix C provides a list of frequently asked questions. *[Under review.]*
- Appendix D contains a sample permit application form.
- Appendix E contains a sample pre-closure notification form.
- Appendix F contains a sample inventory form.
- Appendix G contains training presentation materials for the Rule.
- Appendix H presents the national primary drinking water standards.
- Appendix I contains “Best Management Practices for the Protection of Ground Water: A Local Official’s Guide to Managing Class V UIC Wells” by Connecticut Department of Environmental Protection.
- Appendix J contains a glossary used in this implementation guide.

Apart from this implementation guide, EPA has developed the following guidance documents on:

- C Delineating other sensitive ground water areas.
- C Converting motor vehicle waste disposal wells to other Class V wells.

Finally, a guidance document has been prepared by EPA to help States to adopt the new requirements of the Class V Rule to retain their primacy of the Class V program. This guidance includes a detailed time frame, guidelines, and references for States to submit their primacy revision packages for EPA review and approval.

**SECTION 1 FEDERAL REQUIREMENTS APPLICABLE TO ALL CLASS V WELLS (40 CFR 144)**

**1.A. Consolidation of Class V Requirements in Subpart G of 40 CFR 144**

The Class V Rule consolidates requirements for all Class V wells in Subpart G of 40 CFR 144. Subpart G is written in an easy to understand “plain English” format. Class V well owners and operators are subject to all applicable UIC Program requirements in 40 CFR 144 through 147. While most of the relevant requirements are repeated or referenced in Subpart G, well owners and operators should read Parts 144 - 147 to understand the entire UIC Program.

**1.B. General Requirements for Class V Wells**

The minimum Federal requirement for all Class V wells (with the exception of motor vehicle waste disposal wells and large-capacity cesspools) is “authorization by rule” (40 CFR 144.24). Class V wells are authorized by rule and may inject as long as:

- (1) They do not endanger USDWs (40 CFR 144.12), and
- (2) The well owners or operators submit basic inventory information (40 CFR 144.26).

If a Class V well has been determined to be endangering USDWs, the UIC Program Director may call the well owner or operator in for a permit (40 CFR 144.25), require that the well be closed, or request additional information from the well owner or operator (40 CFR 144.27). Table 1.1 lists the minimum Federal requirements, their locations in the CFR, and in the new Subpart G.

Table 1.1 - UIC Requirements for all Class V Injection Wells

Existing Rule Requirements	Existing Federal Citation	Subpart G
Submission of inventory information	40 CFR 144.26	40 CFR 144.83(a)
Non-endangerment of USDWs	40 CFR 144.12	40 CFR 144.82(a)
Submission of requested information (DI States)	40 CFR 144.27	40 CFR 144.83(b)
Apply for a permit (as required)	40 CFR 144.25	40 CFR 144.84(b)

**1.C. Non-Endangerment Requirement (Mandatory)**

The minimum Federal requirements do not allow the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 141 or may adversely affect public health (40 CFR 144.12(a)). The regulations require the UIC Program to take one or more of the following actions if they learn that a

Class V well may cause a violation of a primary drinking water regulation or adversely affect the public health (40 CFR 144.12(c)):

- (1) Require the well owner or operator to obtain an individual permit;
- (2) Order the well owner or operator to take actions (including well closure) to prevent the violation; or
- (3) Take enforcement action.

The UIC Program may take emergency action if the introduction of a contaminant into the USDWs may present an imminent and substantial endangerment to public health (40 CFR 144.12(e)).

#### **1.D. Inventory Requirement (Mandatory)**

The owner or operator of a Class V injection well must submit inventory information to the UIC Program in a timely manner (40 CFR 144.26). A well owner or operator is not authorized to inject until they submit inventory information. At a minimum, the well owner or operator must provide the following (40 CFR 144.83(a)(2)(i)):

- (1) Facility name and location
- (2) Name and address of legal contact
- (3) Ownership of facility
- (4) Nature and type of injection wells, and
- (5) Operating status of injection wells

Note: This information is requested on the national “Inventory of Injection Wells” form (OMB No. 2040-0042). A copy of the form can be found in Appendix F.

Owners or operators of existing Class V injection wells that have not submitted inventory information are in violation of the inventory requirement and are not allowed to inject into their wells. In Class V UIC Primacy States, well owners and operators who have not submitted inventory information must contact the States to determine what and when they need to submit to fulfill the inventory requirement (40 CFR 144.83(a)(1)(ii)). Additional requirements for well owners and operators in DI States are outlined in Section 1.E.

#### **1.E. Additional Requirements of DI Programs (Inventory and Information Request)**

The Class V Rule changed the timing of the inventory requirement for owners and operators of all Class V wells in DI States. Well owners and operators must submit inventory information on their new Class V wells *prior to constructing* their wells (40 CFR 144.83(a)(1)(i)).

If owners or operators have not submitted inventory information, they must cease injection and submit inventory information (40 CFR 144.83(a)(1)(ii)). A well owner or operator is not allowed to inject into a well that has not been properly inventoried. Upon submission of inventory information, a well owner or operator must wait 90 days before resuming injection, unless EPA notifies them that they can begin injection sooner (40 CFR 144.83(a)(1)(ii)). Owners and operators of certain Class V well types are required to submit additional information under the inventory requirements (40 CFR 144.26(b)(1)(iii)(F)).

EPA may require the owner or operator of any well authorized by rule to submit information for review to determine if a well may be endangering a USDW in violation of 40 CFR 144.12. EPA must make their request in writing, with a brief statement of the reasons for requiring the information (40 CFR 144.27).

#### **1.F. Permit Requirement (when deemed necessary)**

A UIC Program Director may require the owner or operator of any Class V well to apply for and obtain an individual or area UIC permit (40 CFR 144.25). Criteria for requiring a permit include:

- (1) The injection well is not in compliance with any UIC requirements (e.g., endangering USDWs)
- (2) The injection well is not, or no longer is, within the category of wells and types of well operations authorized in the UIC regulation, and
- (3) The protection of USDWs requires that the injection operation be regulated by requirements (e.g., corrective action, monitoring and reporting, or operation), which are not contained in the UIC regulation

Permits for Class V wells are generally effective for a fixed term not to exceed 10 years (40 CFR 144.36). A Class V well owner or operator is not allowed to inject into the well upon the effective date of permit denial, or upon failure by the owner or operator to submit an application in a timely manner as specified in the notice from the UIC Program (40 CFR 144.25).

## **SECTION 2 KEY DATES OF THE CLASS V RULE**

### **2.A. Effective Date of the Class V Rule**

The Class V Rule adds new requirements for two categories of Class V wells to ensure protection of USDWs: motor vehicle waste disposal wells and large-capacity cesspools.

**Class V Rule Publication and Effective Dates:**

- C Signed by the Administrator on November 23, 1999.
- C Published on December 7, 1999 (64 FR 68546).
- Effective on April 5, 2000.

### **2.B. Important Compliance Dates to be Tracked by UIC Programs**

#### **2.B.1. New and Existing Large-Capacity Cesspools**

Under DI Programs, new large-capacity cesspools are banned nationwide as of April 5, 2000. The ban becomes effective in Primacy States once their new State rule requirements are finalized. New wells are those for which construction started on or after April 5, 2000. In addition, all existing large-capacity cesspools are to be closed nationwide by April 5, 2005. Additional discussions on large-capacity cesspools are found in Section 3 of this implementation guide.

If a large-capacity cesspool is found to pose an imminent danger to public health, EPA expects that the State will use existing authorities to require the well owner or operator to cease injection before the April 5, 2005 deadline.

**Key Compliance Dates Associated with Large-Capacity Cesspools:**

- New Large-Capacity Cesspools
  - < For DI Programs - Nationwide ban as of April 5, 2000
  - < For Primacy States - April 5, 2000 ban takes effect on date of State rule changes
- Existing Large-Capacity Cesspools
  - < Closed nationwide by April 5, 2005

## **2.B.2. New and Existing Motor Vehicle Waste Disposal Wells**

Under DI Programs, new motor vehicle waste disposal wells are banned nationwide as of April 5, 2000. The ban becomes effective in Primacy States once their new State rule requirements are finalized. New wells are those for which construction started on or after April 5, 2000. Owners and operators of existing motor vehicle waste disposal wells in *regulated areas* must either close their well or seek a waiver from the ban and obtain a permit to continue operation (40 CFR 144.88(b)(1)). The Rule outlines minimum permit conditions.

*Regulated areas* are ground water protection areas assessed under Section 1453 of the SDWA for CWSs and NTNCWSs that use ground water as a source and other sensitive ground water areas delineated by States or EPA Regions for DI Programs. Detailed discussions of the source water assessment and protection programs and other sensitive ground water areas are available in Section 4 of this implementation guide.

Key dates for regulating existing motor vehicle waste disposal wells are: (1) the completion of local source water assessments for CWSs and NTNCWSs that use ground water as a source and (2) the delineation of other sensitive ground water areas, by January 1, 2004. A State may seek and receive up to a one-year extension to complete its assessments or delineation, if the State demonstrates that it has made reasonable progress in completing its assessment or delineation process. States must apply for the extension by June 1, 2003 (40 CFR 144.87(b)(1)(ii) and 144.87(c)).

### Important State Deadlines for Existing Motor Vehicle Waste Disposal Wells:

- January 1, 2004 -- States must complete all source water assessments for CWSs and NTNCWSs that use ground water as a source (40 CFR 144.87(b)(ii)).\*
- January 1, 2004 -- States must delineate other sensitive ground water areas (40 CFR 144.87(c)).\*

\* If a State is making reasonable progress in completing the task, EPA may grant an extension of up to one year from the January 1, 2004 deadline. The State must apply for the extension by June 1, 2003 (40 CFR 144.87(b)(ii) and 144.87(c)).

Additional discussions on the new requirements for motor vehicle waste disposal wells are available in Section 5 of this guide. Detailed compliance time lines for motor vehicle waste disposal wells are presented in Sections 6, 7, and 8. In general, owners and operators of wells located in ground water protection areas must be in compliance one year after their local assessment is complete (40 CFR

144.88(b)(1)(i) (see Section 6). Owners and operators of wells located in other sensitive ground water areas must be in compliance by January 1, 2007 or January 1, 2008, if a State is granted a one-year extension to complete the delineation (40 CFR 144.88(b)(1)(ii) (see Section 7).

## **SECTION 3 REQUIREMENTS AND IMPLEMENTATION TIME LINE FOR LARGE-CAPACITY CESSPOOLS**

### **3.A. Definition of Large-Capacity Cesspools**

A cesspool is typically “a drywell that receives untreated sanitary waste containing human excreta, and which sometimes has an open bottom and/or perforated sides.” A cesspool is considered large capacity when used by:

- (1) A multiple dwelling, community or regional system for the injection of waste (e.g., a duplex or apartment building), or
- (2) Any non-residential cesspool that is used solely for the disposal of sanitary waste and has the capacity to serve 20 or more people per day (e.g., a rest stop or church).

The Class V Rule does **not** affect cesspools used by single family homes or non-residential cesspools that serve fewer than 20 people in a day. In addition, a drywell receiving effluent from a septic tank (i.e., a septic tank and drywell combination) is not considered to be a cesspool.

Many States do not use the “20 persons a day” criterion and instead use waste flow rates or cesspool volumetric capacity to classify what is a large-capacity cesspool. EPA recognizes that States may choose an alternate definition for large-capacity cesspools (a capacity standard), as long as it is comparable to the “20 person per day” criterion.

### **3.B. Nationwide Ban of New Large-Capacity Cesspools**

Under DI Programs, new large-capacity cesspools are banned nationwide as of April 5, 2000. The ban becomes effective in Primacy States once their new State rule requirements are finalized. New wells are those for which construction started on or after April 5, 2000 (40 CFR 144.88(a)(2)).

Under the ban, large-capacity cesspools may no longer be constructed. States should notify the appropriate organizations and individuals to make sure that new large-capacity cesspools are no longer allowed. These agencies include: health departments, plumbing associations, construction contractors, septic system installers, and building inspectors.

### **3.C. Requirements for Existing Large-Capacity Cesspools**

All existing large-capacity cesspools must be closed by April 5, 2005 (40 CFR 144.88(a)(1)(i)). There is no extension of the compliance deadline to owners and operators of large-capacity cesspools.

#### **3.C.1. Pre-Closure Notification**

The pre-closure notification requirement applies to both Primacy States and DI Programs. Before closing a large-capacity cesspool, the owner or operator must notify the State or EPA UIC Program of their intent to close the well at least 30 days prior to well closure (40 CFR 144.88(a)(1)(ii)).

States are not required to respond to pre-closure notifications. The 30-day period was established to allow States sufficient time to respond to pre-closure notices if they choose to do so. States can allow or require well closure before 30 days, if they believe that such actions would be more protective of public health (40 CFR 144.88(a)(1)(ii)).

EPA has developed the “Class V Well Pre-Closure Notification Form” (OMB No. 2040-0214) for DI programs. A copy of the form is available in Appendix E. Primacy States may use their own pre-closure notification systems, or adopt all or part of the EPA form for their own use.

#### **3.C.2. Well Closure Requirements**

EPA has **not** promulgated new owner and operator requirements for well closure. However, the existing rule states that:

- Wells must be closed in a manner that prevents movement of contaminated fluid that may endanger USDWs (40 CFR 144.89(a)(1)).
- Any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well must be disposed or managed in accordance with all applicable Federal, State, and local regulations and requirements (40 CFR 144.89(a)(1)).

States and EPA UIC Programs may have additional or more specific closure requirements (40 CFR 144.82(b)).

### **3.D. General Requirements for Endangering Large-Capacity Cesspools**

All large-capacity cesspools have the potential to endanger USDWs. States can and should use existing authorities to take any appropriate enforcement actions against the owner and operator of an imminently endangering well to ensure protection of USDWs.

The deadline date associated with the Class V Rule for existing large-capacity cesspools (i.e., closure by April 5, 2005) would not be applicable for wells that are found to be an imminent endangerment to USDWs.

### **3.E. Jurisdictional Issues**

UIC Programs are responsible for ensuring that the new requirements for large-capacity cesspools are implemented. However, cesspools of varying sizes are commonly regulated by different governmental offices in different States. In many States, onsite wastewater disposal systems are regulated either by the State Department of Health or by local departments or boards of health (e.g., town, city, or county board of health). The UIC Program is responsible for ensuring that these non-UIC programs meet UIC program requirements when regulating large-capacity cesspools.

UIC Programs need to work with the appropriate agencies in their States to ensure that all State requirements are consistent with the ban, identify areas of joint jurisdiction, and ensure that the UIC program requirements are met. Joint jurisdiction (across more than one agency) can be confusing to large-capacity cesspool owners and operators. For example, a local or State agency may allow or permit the construction and operation of large-capacity cesspools which are banned by the Class V Rule.

The UIC Program may transfer part of their authorities to other agencies (e.g., health departments) to:

- Oversee the closure of large-capacity cesspools, and
- Ensure no new large-capacity cesspools are constructed.

However, the UIC Program is responsible for ensuring that the new requirements for large-capacity cesspools are implemented. Information on transfer of authorities is found in the State Primacy Revision Guide.

## **SECTION 4 GROUND WATER PROTECTION AREAS, OTHER SENSITIVE GROUND WATER AREAS, AND THE CLASS V RULE**

The requirements for existing motor vehicle waste disposal wells apply only to those injection wells located in ground water protection areas and other sensitive ground water areas. Under Section 1453 of the SDWA, as amended in 1996, States are required to complete source water assessments for all public water systems (PWSs) by May 2003 (including a maximum extension of 18 months).

State Source Water Assessment Programs – for all public water systems (PWSs) include:

- Delineation of source water protection areas.
- Inventory of potential contaminant sources in the delineated areas.
- Determination of susceptibility of the water systems to contamination.
- Making assessment results publicly available.

A local source water assessment is considered completed when the results of the assessment are made available to the public.

The new requirements apply to existing motor vehicle waste disposal wells in: (1) source water assessment areas of community water systems (CWS) and non-transient non-community water systems (NTNCWS) that use ground water (see Section 4.A), and (2) other sensitive ground water areas identified by States or EPA Regions, which require additional protection from motor vehicle waste disposal wells (see Section 4.C).

### **4.A. Assessments for Ground Water Protection Areas**

A ground water protection area, as defined by the Class V Rule is:

*“a geographic area near and/or surrounding community and non-transient non-community water systems that use ground water as a source of drinking water. These areas receive priority for the protection of drinking water supplies and States are required to delineate and assess these areas under Section 1453 of the Safe Drinking Water Act.”*

The additional requirements in 40 CFR 144.88 apply to Class V motor vehicle waste disposal wells located in ground water protection areas for CWSs and NTNCWSs. In many States, these areas will be the same as Wellhead Protection Areas that have been or will be delineated as defined in Section 1428 of the SDWA.

Ground water protection areas receive priority for the protection of drinking water supplies and States are required to delineate and assess these areas as part of their State Source Water Assessment and Protection Programs. In cases where the State delineated zones or areas representing various levels of protection, the State will need to determine which areas correspond to ground water protection areas for the purpose of the Class V Rule.

Note: Surface water systems and transient non-community water systems (TNCWSs) are not included in ground water protection areas as specified in the Class V Rule.

#### **4.B. Time Line for States to Complete Their Assessments of Ground Water Protection Areas**

Under Section 1453 of the SDWA, States are required to ensure that source water assessments are completed for all public water systems (i.e., including all CWSs, NTNCWSs, and TNCWSs) by May 2003 (i.e., with a 18-month extension). Many States have already requested the extension in their Source Water Assessment and Protection Program Plans.

Under the Class V Rule, States are given additional time (i.e., until January 1, 2004) to complete their assessment of ground water protection areas (for CWSs and NTNCWSs only) before certain conditions of the Rule will take effect (e.g., statewide applicability of the Rule for existing motor vehicle waste disposal wells). EPA believes that all States will complete their source water assessments for ground water protection areas by the given deadline. If a State has made substantial progress in completing its assessments but requires more time to complete all the local assessments, the State can apply to EPA for an extension. Applications for extensions must be submitted to EPA by June 1, 2003 (40 CFR 144.87(b)(1)(ii)). EPA may grant up to a one-year extension (i.e., up to January 1, 2005) for a State to complete the remaining assessments. The extension to complete assessments for ground water protection areas is a provision of the Class V Rule only.

If a State does not complete the assessments for ground water protection areas, the requirements for motor vehicle waste disposal wells apply statewide. Owners and operators, regardless of their location have one year to comply with the Rule.

A summary of the time line for States to complete their local assessments of ground water protection areas is presented in Table 4.1.

Table 4.1 - Time Line for States to Complete Assessments of Ground Water Protection Areas

State Action Item	Requirement Date
Completion of all Source Water Assessments	<i>circa</i> November 2001
Completion of all Source Water Assessments with 18 month extension	<i>circa</i> May 2003
Application for Extending the Deadline to Complete Assessments for Ground Water Protection Areas	June 1, 2003
Completion of Assessments of Ground Water Protection Areas	January 1, 2004
Completion of Assessments of Ground Water Protection Areas with the one-year extension granted by EPA	January 1, 2005

#### 4.C. Other Sensitive Ground Water Areas

The requirements for existing motor vehicle waste disposal wells are expanded to other sensitive ground water areas as designated by the States, or EPA Regional Offices for DI Programs. Other sensitive ground water areas are areas critical for the protection of USDWs from contamination by Class V wells. Expanding the Rule to other sensitive ground water areas gives States and EPA Regions the flexibility to identify areas, outside ground water protection areas, that require additional protection from endangering Class V injection wells.

Examples of Other Sensitive Ground Water Areas:

- < Areas overlying sole-source aquifers.
- < Highly productive aquifer supplying private wells and TNCWSs.
- < Continuous and highly productive aquifers in areas away from public water supply wells.
- < Areas where water supply aquifers are being recharged.
- < Karst aquifers that discharge to surface reservoirs serving as public water supplies.
- < Vulnerable or sensitive hydrogeologic settings such as glacial outwash deposits, eolian sands, and fractured volcanic rock.
- < Areas of special concern because of a combination of factors (such as hydrogeologic sensitivity, depth to ground water, significance as a drinking water source, and prevailing land use practices).

#### **4.D. Requirements and Time Line for States to Delineate Other Sensitive Ground Water Areas**

The delineation of other sensitive ground water areas is not tied to the State Source Water Assessment and Protection Programs. UIC Programs in Primacy States and EPA Regions for DI Programs, will be responsible for completing the delineation of these sensitive ground water areas.

First, by December 29, 2000, States must develop a plan for identifying other sensitive ground water areas (40 CFR 145.23(f)(12)). The plan should address the following:

- Criteria for identifying certain sensitive geologic conditions such as karst, fractured bedrock, and unconsolidated aquifers.
- Criteria for identifying legal designations such as sole source aquifers.
- Criteria that will be used for excluding areas, such as the depth to ground water, confining layers, and likelihood of ground water use.
- Public participation process.
- Description of how the results and information will be made public.

The plan for delineating other sensitive ground water areas is required as part of a State's primacy revision package and is therefore subject to EPA approval. Upon approval by EPA, the State will have until January 1, 2004 to complete the delineation process. EPA believes that all States will complete their delineation of other sensitive ground water areas by the given deadline. If a State requires more time to complete the delineation, it may apply for an extension of up to one year (i.e., January 1, 2005). Such an extension will only be granted if a State has made reasonable progress in completing its delineation but requires more time to complete the task. In addition, a State must complete and submit the extension request to EPA by June 1, 2003 (40 CFR 144.87(c)).

If a State does not delineate other sensitive ground water areas, the requirements for motor vehicle waste disposal wells apply statewide. Owners and operators have until January 1, 2007 (or January 1, 2008 if the State receives an extension) to comply with the Rule.

A summary of the time line for States to delineate other sensitive ground water areas is presented in Table 4.2.

Table 4.2 - Time Line for States to Delineate Other Sensitive Ground Water Areas

State Action Item	Requirement Date
Submission of Delineation Plan	December 29, 2000
Application for Extending the Deadline to Delineate Other Sensitive Ground Water Areas (if needed)	June 1, 2003
Completion of the Delineation of Sensitive Ground Water Areas (without the one-year extension granted by EPA)	January 1, 2004
Completion of the Delineation of Sensitive Ground Water Areas (with the one-year extension granted by EPA)	January 1, 2005

**4.E. Requirements and Time Line for EPA Regions (with DI Programs) to Delineate Other Sensitive Ground Water Areas**

In the case of DI programs, the EPA Regions plan to work with their States and Tribes to complete their plans for delineating other sensitive ground water areas and make them available for public comments by December 29, 2000. This date was selected to correspond with the deadline for Primacy States. Public Notice will be given regarding the plans availability as appropriate. The EPA Regions and DI Programs must then complete the delineation by the January 1, 2004 deadline (40 CFR 144.87(c) and 145.23(f)(12)). In order to give DI Programs the maximum flexibility, EPA will encourage appropriate agencies within the DI State or Tribe to do the delineation. If the DI State or Tribe agrees to perform the delineation, the agreement between the DI State or Tribe and EPA should be formalized in writing. EPA may provide technical assistance and/or enter into a Memorandum of Understanding with the States or Tribe in developing the plans and conducting the delineation of other sensitive ground water areas.

If a DI State or Tribe requires more time to delineate these areas, it can apply for an extension to complete the delineation by January 1, 2005. Such an application must be completed and submitted to EPA by June 1, 2003 (40 CFR 144.87(c)). An extension will only be granted if reasonable progress has been made in completing the delineations but more time is needed to complete the task.

**4.F. States Choosing not to Delineate Other Sensitive Ground Water Areas**

Primacy States have the flexibility not to delineate other sensitive ground water areas. If Primacy States do not delineate other sensitive ground water areas, the Rule applies statewide. Such a decision should be reflected in the primacy revision application. Detailed discussions on the application of the Class V Rule in States that do not delineate other sensitive ground water areas are available in Section 8 of this implementation guide.

A State may decide not to delineate additional sensitive ground water areas for a variety of reasons that include:

- A statewide ban of motor vehicle waste disposal wells exists.
- There is an absence of motor vehicle waste disposal wells across the State.
- The majority, or all, of the State is considered to be a sensitive ground water area.

#### **4.G. Information Sharing for the Assessments of Ground Water Protection Areas**

##### **4.G.1. Interagency and Interdepartmental Information Exchange**

For a State with primacy in both the Class V UIC and Public Water System Programs, the UIC Program should work closely with the State Public Water System Program to ensure that the results of local assessments are made known to the UIC Program and made available to the public. Information exchange between the UIC and Public Water System Programs would be essential to implement the Class V Rule.

For a State with primacy in the Public Water System Program but not the Class V UIC Program, the EPA Regional Office will need to work closely with the State Public Water System Program to ensure that the results of local assessments are made available to EPA and the public in a timely manner.

Apart from making sure that the results of local assessments are made available to the UIC Programs and the public, interagency and interdepartmental communications are crucial for:

- The prioritization of the assessment process (e.g., ensuring the completion of local assessments of ground water protection areas), and
- The application to extend the deadline to complete local assessments of ground water protection areas.

#### **4.G.2. Information for the Public and Well Owners and Operators**

To assist well owners and operators in complying with the Class V Rule requirements, EPA strongly encourages States to consider the following:

- Make the results of local source water assessments for ground water protection areas available to the public in a timely manner.
- ***Notify owners and operators who have submitted inventory regarding the new rule requirements and compliance deadlines.***
- Conduct additional outreach activities - outreach can be coordinated between the Source Water Assessment and Protection, the UIC Programs and outside groups such as trade organizations, building and plumbing inspectors, and local watershed associations.

#### **4.H. Information Sharing for the Delineation of Other Sensitive Ground Water Areas**

##### **4.H.1. Interagency and Interdepartmental Information Exchange**

For States with primacy in the Class V UIC Program, the UIC Program should work with other appropriate State agencies (e.g., State Source Water Assessment Program, State Geological Surveys, and State Drinking Water Program) to develop the plans and delineate other sensitive ground water areas. It is also important to use experiences gained from the process of susceptibility determinations (a part of the source water assessment process) to develop the delineation approach for other sensitive ground water areas.

For DI Programs, EPA will work with the States and Tribes to develop plans for delineating other sensitive ground water areas. EPA will encourage DI States and Tribes to conduct the delineations. EPA may provide technical assistance to States and Tribes and/or enter into a Memorandum of Understanding to develop the plans and conduct the delineation of other sensitive ground water areas. If a State or Tribe decides not to take on the responsibility of preparing a plan and conducting the delineation, the EPA UIC program will be responsible for meeting the various deadlines.

Apart from making sure that the results of delineation are made available to the UIC Programs and the public, interagency and interdepartmental communications are crucial for:

- Setting the criteria of the delineation process, and

- Developing the application to extend the deadline to complete delineation of other sensitive ground water areas.

#### **4.H.2. Information for the Public and Well Owners and Operators**

Upon the completion of the delineation of other sensitive ground water areas, the UIC programs should make the delineation results available to the public in a timely fashion. Outreach efforts should be targeted to affected well owners and operators regarding their responsibilities in meeting the Class V Rule requirements. EPA recommends that UIC Program Directors notify owners and operators who have submitted inventory regarding the new rule requirements and compliance deadlines. In addition, outreach programs through trade organizations, building and plumbing inspectors, and local watershed associations can be used to make well owners and operators aware of their compliance requirements.

## **SECTION 5 NEW REQUIREMENTS FOR MOTOR VEHICLE WASTE DISPOSAL WELLS**

### **5.A. Definition of Motor Vehicle Waste Disposal Wells**

Motor vehicle waste disposal wells are typically drywells, septic tank and leachfield combinations, or other subsurface fluid distribution systems 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.”*

### **5.B. Nationwide Ban of New Motor Vehicle Waste Disposal Wells**

Under DI Programs, new motor vehicle waste disposal wells are banned nationwide as of April 5, 2000. The ban becomes effective in Primacy States once their new State rule requirements are finalized.

Floor drains at motor vehicle service bays may no longer be connected to septic systems or drywells. States should notify all appropriate organizations and individuals to make sure that new motor vehicle waste disposal wells are no longer allowed. These agencies include: health departments, plumbing associations, construction contractors, septic system installers, and building inspectors.

### **5.C. Requirements for Existing Motor Vehicle Waste Disposal Wells**

#### **5.C.1. Pre-Closure Notification**

The pre-closure notification requirement applies to both Primacy States and DI Programs. Before closing or converting a motor vehicle waste disposal well, the owner or operator must notify the State or EPA UIC Program of their intent to close the well at least 30 days prior to well closure (40 CFR 144.88(a)(1)(ii)).

States are not required to respond to pre-closure notifications. The 30-day period was established to allow States sufficient time to respond to pre-closure notices if they choose to do so. States can allow or require well closure before the 30 days, if they believe that such actions would be more protective of public health. Well owners and operators may only close their wells sooner if required by State UIC Programs (40 CFR 144.88(a)(1)(ii)).

EPA has developed the “Class V Well Pre-Closure Notification Form” (OMB No. 2040-0214) for DI programs. A copy of the form is available in Appendix E. Primacy States may use their own pre-closure notification systems, or adopt all or part of the EPA form for their own use.

### **5.C.2. Well Closure Requirements**

EPA has **not** promulgated new owner and operator requirements for well closure. However, the Rule states that:

- Wells must be closed in a manner that prevents movement of contaminated fluid that may endanger USDWs (40 CFR 144.89(a)(1)).
- Any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well must be disposed or managed in accordance with all applicable Federal, State, and local regulations and requirements (40 CFR 144.89(a)(1)).

State and EPA UIC Programs may have additional or more specific closure requirements (40 CFR 144.82(b)).

### **5.C.3. Permit Requirements**

The Class V Rule bans existing motor vehicle waste disposal wells in ground water protection areas and other sensitive ground water areas. However, UIC Directors can grant a waiver from the ban and issue a permit to well owners and operators. Although States may develop and use other approaches to grant waivers (e.g., the use of general permits), EPA believes that the issuance of site-specific permits is the most protective approach.

In States that decide to allow for a waiver and issue permits, the permit will also have to meet all requirements found in 40 CFR 144.25.

Permits for motor vehicle waste disposal wells must include the following minimum permit conditions (40 CFR 144.88(b)(1)(iv)):

- (1) Fluids released in motor vehicle waste disposal wells must meet the primary drinking water standards and other appropriate health-based standards (as determined by the UIC Program Director) *at the point of injection*.<sup>7</sup>
- (2) Best management practices (BMPs) that must be followed as specified in the permit.
- (3) Monitoring of injectate and sludge (if present in drywells or tanks holding injectate) both initially and on a continuing basis, must be specified in order to demonstrate compliance with the drinking water and other health-based standards.

NOTE: The frequency of monitoring will be determined by the UIC Program Director and specified in the permit. (See Section 5.C.4)

UIC Directors should use their best judgment when issuing waivers from the ban, and consider factors such as maintenance of treatment systems, potential for impacting water systems, a facility's compliance history, and records showing waste recycling.

#### **5.C.4. Monitoring Requirements**

The Class V Rule does not specify monitoring requirements. The UIC Program Director must establish specific monitoring requirements when developing permits.

EPA believes that UIC Directors should consider the following kinds of monitoring requirements:

- (1) Owners or operators should be required to characterize the quality of their injectate and any sludge.
- (2) If liquid from the sludge has chemical concentrations below the drinking water MCL and other health-based standards, owners or operators might be required to analyze the injectate quarterly for the first three years and then annually if it is consistently below the drinking water standards and other health-based standards. They also might be required to analyze their sludge annually.

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<sup>7</sup> Point of injection for a Class V well is the last accessible sample point before the release of waste fluids into the subsurface environment. For example, the point of injection of a Class V septic system might be the distribution box – the last accessible sampling point before the waste fluids drain into the leach field and the underlying soils. For a drywell, it is likely to be the well bore itself.

- (3) If the injectate is below the drinking water MCL and other health-based standards, but liquid from the sludge is above the appropriate standards, then owners or operators might have to follow the same monitoring requirements as (2), in addition to pumping and properly disposing of their sludge.
- (4) If the injectate is above the drinking water MCL or health-based standards, the owners or operators would need to:
  - (a) Install treatment to meet permit requirements to meet drinking water MCL and other health-based standards at the point of injection;
  - (b) Pump and properly dispose of their sludge;
  - (c) Perform quarterly sampling of injectate for the first three years and then annually if consistently below the drinking water MCL and other health-based standards;
  - (d) Perform annual sampling of the sludge; and
  - (e) Other requirements established by the State to protect USDWs (e.g., ground water monitoring and non-degradation requirements).
- (5) If owners and operators cannot meet the above conditions, they may be required to close the well.

#### **5.C.5. Extension of Compliance Date**

The UIC Director (States and EPA) may grant a one-year extension to well owners and operators if the most efficient compliance option is connection to sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

#### **5.D. General Requirements for Endangering Motor Vehicle Waste Disposal Wells**

Any motor vehicle waste disposal well may have the potential to endanger USDWs regardless of their location. States should use existing authorities to take any appropriate enforcement actions against the owner or operators of an endangering well to ensure the protection of USDWs.

The compliance dates associated with the Class V Rule for motor vehicle waste disposal wells (i.e., the various geographically-based compliance dates) may not be applicable to wells that are found to be an endangerment to USDWs.

## **5.E. Other Issues Associated with Motor Vehicle Waste Disposal Wells**

### **5.E.1. Storm Water Drainage Wells**

Motor vehicle service facilities with storm water drainage wells that are designed for storm water management but may also receive insignificant amounts of fuel due to unintentional small volume leaks, drips, or spills at the fuel pumps are not considered to be motor vehicle waste disposal wells. These drainage wells are not subject to the new Class V Rule requirements. However, storm water wells are still regulated and are subject to the non-endangerment provision. EPA is developing a guidance to assist Regions, States and owners and operators of this type of well to determine if wells are motor vehicle waste disposal wells or storm water drainage wells. A copy of the draft guidance on determining the status of storm water drainage wells located at motor vehicle service facilities is being developed and will be available in the near future.

### **5.E.2. Conversion of Motor Vehicle Waste Disposal Wells to Other Class V Wells**

States or EPA may authorize the conversion or reclassification of a motor vehicle waste disposal well to another type of Class V well. Motor vehicle waste disposal wells may only be converted to receive other fluids (e.g., snow melt and exterior carwash water), if:

- All motor vehicle-related fluids are segregated by a physical barrier and are not allowed to enter the well (40 CFR 144.89(b)), and
- The facility's compliance history and records of proper waste disposal make it unlikely that motor vehicle waste will enter the well (40 CFR 144.89(b)).

NOTE: The use of a semi-permanent plug as the means to segregate waste is not sufficient to convert a motor vehicle waste disposal well to another type of Class V well (40 CFR 144.89(b)).

EPA believes that in order to meet the above requirements for well conversion, owners and operators of these other types of Class V injection wells in motor vehicle service facilities should implement BMPs. EPA is developing a guidance for the conversion of motor vehicle waste disposal wells and it will be available under separate cover.

**SECTION 6 IMPLEMENTATION TIME LINE FOR EXISTING MOTOR VEHICLE WASTE DISPOSAL WELLS IN GROUND WATER PROTECTION AREAS**

**6.A. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in Ground Water Protection Areas with Assessments Completed by January 1, 2004**

Owner and Operator Compliance Dates for Motor Vehicle Waste Disposal Wells in Ground Water Protection Areas with Completed Local Source Water Assessments:

- One year from the completion date of the local assessment

Note: States and EPA may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

The compliance deadline for affected well owners and operators is one year after the completion of the local assessment (40 CFR 144.88(b)(1)(v)). If a State requires more time to complete its local assessments beyond the January 1, 2004 deadline, the State can apply for an extension by June 1, 2003, (see Section 4.B). The affected well owners and operators will have one year after the completion of the local assessment to comply with the Class V Rule requirements. Again, the State may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

**NOTE:** The extension to complete local assessments is a provision of the **Class V Rule**. The purpose is to provide extra time for States to complete their assessment of ground water protection areas so the Class V Rule does not apply statewide. This is not an extension to the time line for State Source Water Assessments Programs.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells located in ground water protection areas with completed assessments is presented in Table 6.1 and Exhibit 6-1.

Table 6.1 - Time Line for Motor Vehicle Waste Disposal Wells Located in Ground Water Protection Areas with Completed Assessments

State Action Item	Owner and Operator Action	Requirement Date
Completion of all Source Water Assessments by January 1, 2004	Apply for a permit	Within 90 days after the local assessment completion date (recommended)
	Operate under permit conditions, or	Within 1 year after the local assessment completion date, unless granted an extension to comply (up to 1 year)
	Close the well	

If a State completes all local assessments for ground water protection areas by January 1, 2004, the latest compliance date for affected motor vehicle waste disposal well owners and operators is January 1, 2005, unless they are granted an extension of up to one year (40 CFR 144.88(b)(1)(v)).

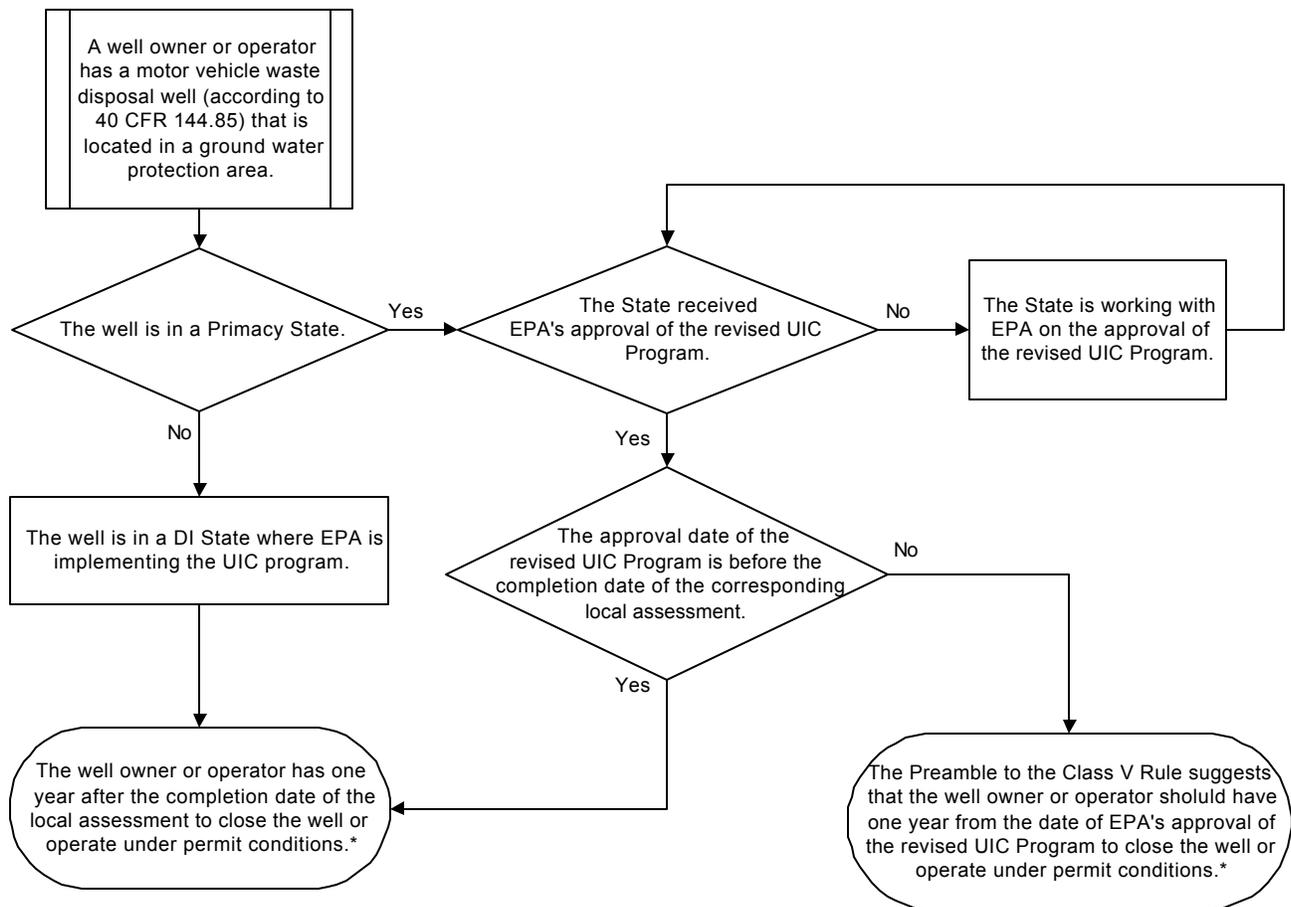
A number of Primacy States may complete some of their local assessments for ground water protection areas before they have revised their Class V UIC Programs. The Preamble to the Rule suggests that, in these cases, owners and operators of existing motor vehicle waste disposal wells located in ground water protection areas (with completed assessments) should have one year from the date of EPA’s approval of their States’ Class V UIC program revisions to comply with the new Class V requirements. Again, the States and EPA may grant a one-year extension to motor vehicle waste disposal well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

**6.B. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in New Ground Water Protection Areas with Assessments Completed After January 1, 2004**

After January 1, 2004, **new** ground water protection areas may be designated by States for **new** CWSs and NTNCWSs that use ground water as a source. In addition, States may officially re-delineate the boundaries of existing ground water protection areas to include additional areas. Motor vehicle waste disposal wells located in these newly assessed ground water areas will have one year to comply with the Class V Rule requirements. Again, the State may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

**Exhibit 6-1  
Compliance Dates for Existing Motor Vehicle Waste Disposal Wells  
in Ground Water Protection Areas with Completed Assessments**

A State must complete all assessments of ground water protection areas by January 1, 2004 unless it is granted a one-year extension to complete its assessments by January 1, 2005.



\* The well owner or operator can apply for a one-year extension if his or her compliance option is connection to a sanitary sewer or installation of new treatment technologies. On a case by case basis, the State or EPA UIC Program will review the application for approval. This one-year extension, however, does not apply to the permit application deadline.

**6.C. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in Ground Water Protection Areas in States that Receive up to a One-Year Extension to Complete Their Assessments**

A State can apply to EPA for an extension if they have made reasonable progress in completing their local assessments for ground water protection areas but require more time beyond the January 1, 2004 deadline. An application for extension must be submitted by June 1, 2003, and the State must show that it has made reasonable progress in completing the assessment (40 CFR 144.87(b)(1)(ii)). EPA may grant up to a one-year extension for a State to complete the remaining assessments (i.e., up to January 1, 2005).

**NOTE:** The extension to complete local assessments is a provision of the **Class V Rule**. The purpose is to provide extra time for States to complete their assessment of ground water protection areas so the Rule does not apply statewide. This is not an extension to the time line for State Source Water Assessments Programs.

Owners and operators of motor vehicles waste disposal wells will have one year from the completion of a local assessment to comply with the requirements of the Class V Rule, with the latest date being January 1, 2006. Again, the State may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies (40 CFR 144.88(b)(1)(v)). This one-year extension does not apply to the permit application deadline.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells located in ground water protection areas in States that received an extension to complete their assessments is presented in Table 6.2 and Exhibit 6-1.

Table 6.2 - Time Line for Motor Vehicle Waste Disposal Wells Located in Ground Water Protection Areas in States that Receive an Extension

State Action Item	Owner and Operator Action	Requirement Date
Completion of All Local Assessment of Ground Water Protection Areas by the Extended Deadline of January 1, 2005	Apply for a permit	Within 90 days after the assessment completion date (recommended)
	Operate under permit conditions, or	Within 1 year after the assessment completion date, unless granted an extension to comply (up to 1 year)
	Close the well	

**6.D. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in States that do not Complete Their Assessments by January 1, 2004**

As discussed in Section 4.B, EPA believes that all States will complete their source water assessments for ground water protection areas by January 1, 2004. The following compliance dates are included to present all possible scenarios.

If a State does not complete its local assessments for ground water protection areas and does not receive an extension, the Class V Rule requirements will apply statewide on January 1, 2004. Owners and operators of motor vehicle waste disposal wells located outside of completed assessment areas, would then have one year (i.e., by January 1, 2005) to close their wells or operate their wells under permit conditions. The State may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells, located outside of completed local assessment areas, in States that do not complete their assessments by January 1, 2004 is presented in Table 6.3.

Table 6.3 - Time Line for All Motor Vehicle Waste Disposal Wells, Located Outside of Completed Local Assessment Areas, in States that do not Complete Their Local Assessments of Ground Water Protection Areas

State Action Item	Owner and Operator Action	Requirement Date
All Local Assessments of Ground Water Protection Areas <b>Not</b> Completed by the Original January 1, 2004 Deadline and do not Receive an Extension	Apply for a permit	By early 2004 (recommended)
	Operate under permit conditions, or	By January 1, 2005, unless granted an extension to comply (up to 1 year)
	Close the well	

**6.E. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in States that Receive an Extension but do not Complete Their Assessments by January 1, 2005**

As discussed in Section 4.B, EPA believes that all States will complete their source water assessments for ground water protection areas by the given deadline. The following compliance dates are included to present all possible scenarios.

If a State receives a one-year extension but does not complete its local assessments for ground water protection areas by the extended deadline, the Class V Rule requirements will apply statewide on January 1, 2005. Owners and operators of all motor vehicle waste disposal wells, located outside of completed local assessment areas, would then have one year to close their wells or operate their wells under permit conditions (i.e., by January 1, 2006). The State may grant a one-year extension to motor

vehicle waste disposal well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells, located outside of completed assessment areas, in States that do not complete their assessments by January 1, 2005 is presented in Table 6.4.

Table 6.4 - Time Line for All Motor Vehicle Waste Disposal Wells, Located Outside of Completed Local Assessment Areas, in States that Receive an Extension but do not Complete Their Local Assessments of Ground Water Protection Areas

State Action Item	Owner and Operator Action	Requirement Date
All Local Assessments of Ground Water Protection Areas <b>Not</b> Completed by the Extended Deadline of January 1, 2005	Apply for a permit	By early 2005 (recommended)
	Operate under permit conditions, or	By January 1, 2006, unless granted an extension to comply (up to 1 year)
	Close the well	

**SECTION 7 IMPLEMENTATION TIME LINE FOR EXISTING MOTOR VEHICLE WASTE DISPOSAL WELLS IN OTHER SENSITIVE GROUND WATER AREAS**

**7.A. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in Other Sensitive Ground Water Areas with Delineation Completed by January 1, 2004**

The Class V Rule also applies to existing motor vehicle waste disposal wells in other sensitive ground water areas to be delineated by individual States and EPA Regions for DI Programs (see Section 4.C). States and EPA Regions must delineate other sensitive ground water areas by January 1, 2004 (40 CFR 144.87(c)).

Owners and operators of wells in other sensitive ground water areas will have until January 1, 2007 to close their wells or operate their wells under permit conditions. The States or EPA may grant a one-year extension to motor vehicle waste disposal well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells located in other sensitive ground water areas is presented in Table 7.1 and Exhibit 7-1.

Table 7.1 - Time Line for Motor Vehicle Waste Disposal Wells Located in Other Sensitive Ground Water Areas with Delineation Completed by January 1, 2004

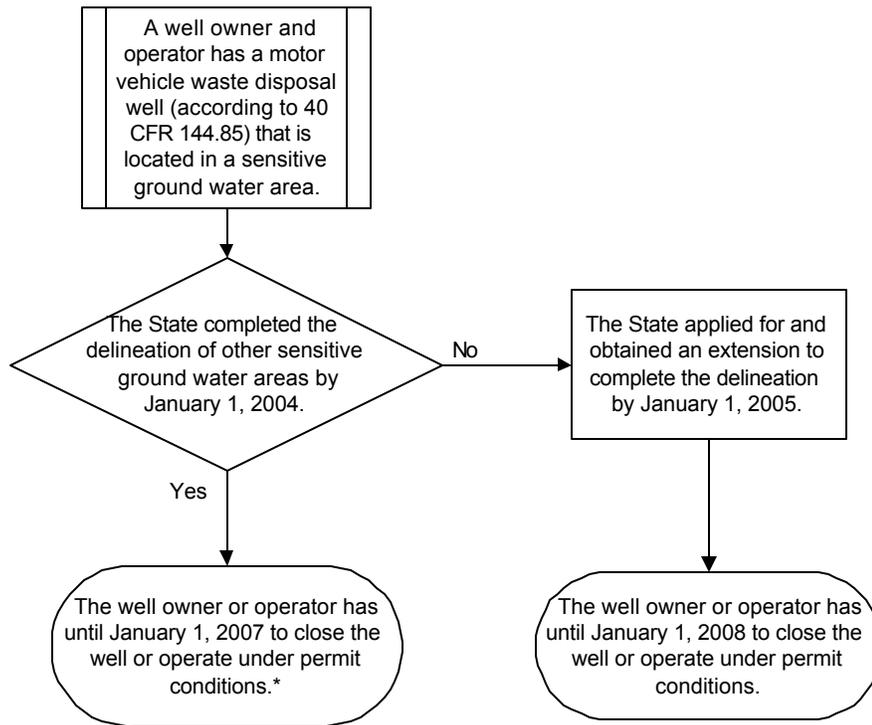
State Action Item	Owner and Operator Action	Requirement Date
Delineate of Other Sensitive Ground Water Areas by January 1, 2004	Apply for a permit	As soon as practical (recommended)
	Operate under permit conditions, or	By January 1, 2007, unless granted an extension to comply (up to 1 year)
	Close the well	

**7.B. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in Other Sensitive Ground Water Areas in States that Receive up to a One-Year Extension to Complete Their Delineation**

States can apply to EPA for an extension for up to one year if they have made reasonable progress in completing the delineations for other sensitive ground water areas but require additional time beyond the January 1, 2004 deadline. An application for extension must be submitted by June 1, 2003 (40 CFR 144.87(c)). If a State receives a one-year extension to delineate other sensitive ground water areas (i.e., with a new deadline of January 1, 2005), affected well owners and operators will have until January 1, 2008 to comply with the Class V Rule requirements. NOTE: In this case, the State **may not** grant a one-year compliance extension to well owners and operators. Therefore, the last possible compliance date for affected motor vehicle waste disposal wells in other sensitive ground water areas is January 1, 2008.

### Exhibit 7-1 Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in Other Sensitive Ground Water Areas

A State must complete the delineation of other sensitive ground water areas by January 1, 2004 unless it is granted a one-year extension to complete the delineation by January 1, 2005.



\* The well owner or operator can apply for a one-year extension if his or her compliance option is connection to a sanitary sewer or installation of new treatment technologies. On a case by case basis, the State and EPA UIC Program will consider review the application for approval. This one-year extension, however, does not apply to the permit application deadline. In addition, this one-year extension is not available when a State is granted a one-year extension to complete its delineation of other sensitive ground water areas.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells located in other sensitive ground water areas with delineations completed by the extended deadline of January 1, 2005 is presented in Table 7.2 and Exhibit 7-1.

**Table 7.2 - Time Line for Motor Vehicle Waste Disposal Wells Located in Other Sensitive Ground Water Areas of States that Receive an Extension to Complete Their Delineation**

State Action Item	Owner and Operator Action	Requirement Date
Delineation of Other Sensitive Ground Water Areas by the Extended Deadline of January 1, 2005	Apply for a permit	As soon as practical (recommended)
	Operate under permit conditions, or	By January 1, 2008
	Close the well	

Note: The one-year extension to well owners and operators is not applicable when a State is granted a one-year extension to complete its delineation, that is, the last possible compliance date for affected wells is January 1, 2008.

**7.C. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells in States that do not Delineate Other Sensitive Ground Water Areas by January 1, 2004**

As discussed in Section 4.D, EPA believes that all States will complete their other sensitive ground water delineations by the deadline. The following compliance dates are for motor vehicle waste disposal wells located outside ground water protection areas (which are under a different compliance schedule as described in Section 6).

If a State does not complete its delineation of other sensitive ground water areas by the January 1, 2004 deadline and does not receive an extension, the Class V Rule requirements apply statewide. Owners and operators of motor vehicle waste disposal wells, located outside of ground water protection areas, have to close their wells or operate their wells under permit conditions by January 1, 2007. The State may grant a one-year extension to well owners and operators, on a case by case basis, if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technologies. This one-year extension does not apply to the permit application deadline.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells, located outside of ground water protection areas, in States that do not delineate other sensitive ground water areas by January 1, 2004 is presented in Table 7.3.

**Table 7.3 - Time Line for All Motor Vehicle Waste Disposal Wells, Located Outside of Ground Water Protection Areas, in States that do not Delineate Other Sensitive Ground Water Areas by January 1, 2004**

State Action Item	Owner and Operator Action	Requirement Date
Delineation of Other Sensitive Ground Water Areas <b>Not</b> Completed by the January 1, 2004 Deadline	Apply for a permit	As soon as practical (recommended)
	Operate under permit conditions, or	By January 1, 2007, unless granted an extension to comply (up to 1 year)
	Close the well	

**7.D. Compliance Dates for Existing Motor Vehicle Waste Disposal Wells, Located Outside of Ground Water Protection Areas, in States that Receive an Extension but do not Complete Their Delineation by January 1, 2005**

As discussed in Section 4.D, EPA believes that all States will delineate other sensitive ground water areas within the given timeframe. The following compliance dates are for motor vehicle waste disposal wells located outside ground water protection areas (which are under a different compliance schedule as described in Section 6).

If a State is granted an extension to delineate other sensitive ground water areas but does not complete its delineation by the extended deadline of (up to) January 1, 2005, the Class V Rule requirements will apply statewide. Owners and operators of all motor vehicle waste disposal wells, located outside of ground water protection areas, would then have to close their wells or operate their wells under permit conditions by January 1, 2008, unless they are located in ground water protection areas and are under a different compliance schedule as described in Section 6.

NOTE: If a State is granted an extension to complete its delineation of other sensitive ground water areas, it **may not** grant the one-year compliance extension to well owners and operators. Therefore, the last possible compliance date for affected wells is January 1, 2008.

A summary of the compliance dates for owners and operators of motor vehicle waste disposal wells, located outside of ground water protection areas, in States that do not delineate other sensitive ground water areas by the extended deadline of January 1, 2005 is presented in Table 7.4.

Table 7.4 - Time Line for Motor Vehicle Waste Disposal Wells, Located Outside of Ground Water Protection Areas, in States that Receive an Extension but do not Complete Their Delineation of Other Sensitive Ground Water Areas

State Action Item	Owner and Operator Action	Requirement Date
Delineation of Other Sensitive Ground Water Areas <b>Not</b> Completed by the Extended Deadline of January 1, 2005	Apply for a permit	As soon as practical (recommended)
	Operate under permit conditions, or	By January 1, 2008
	Close the well	

Note: The one-year extension to well owners and operators is not applicable when a State is granted a one-year extension to complete its delineation, that is, the last possible compliance date for affected wells is January 1, 2008.

## **SECTION 8 STATEWIDE APPLICATION OF THE CLASS V RULE ON EXISTING MOTOR VEHICLE WASTE DISPOSAL WELLS**

A State has the flexibility not to link the Rule implementation schedule to the schedules of the State Source Water Assessment Program and/or the delineation of other sensitive ground water areas. Such a decision, however, must be reflected in the primacy revision application (40 CFR 145.23).

A State may decide not to link the Rule implementation to the assessments of ground water protection areas and/or delineation of other sensitive ground water areas for a variety of reasons that may include:

- C Existing statewide ban of motor vehicle waste disposal wells.
- C New statewide ban of motor vehicle waste disposal wells.
- C Absence of motor vehicle waste disposal wells across the State.
- C All or most of the State is considered a sensitive ground water area.

If a State decides to apply the Rule statewide, it will not need to designate other sensitive ground water areas and therefore will not need to develop and include a delineation plan in the primacy revision application.

In general, the statewide implementation of the Rule may take on one of the following forms:

- C Implement the Rule statewide without linking to the assessments of ground water protection areas and delineation of other sensitive ground water areas.
- C Implement the Rule in ground water protection areas first and then statewide at a later time.
- C Implement the Rule in ground water protection areas first, then in other sensitive ground water areas, and finally statewide.

### **8.A. Statewide Application that is not Linked to Ground Water Protection Areas and Other Sensitive Ground Water Areas**

If a State chooses not to link the implementation of the Rule with the assessment of ground water protection areas and/or the delineation of other sensitive ground water areas, it must develop an implementation time line that is as stringent as the Federal requirements. States should contact the EPA Regional UIC Program to discuss possible implementation timelines.

**8.B. Statewide Application After Implementation in Ground Water Protection Areas**

If a State determines to initially implement the Rule in ground water protection areas and then apply the Rule statewide, it would need to follow the implementation time line associated with the assessments for ground water protection areas and then specify January 1, 2004 as the statewide Rule application date. For wells located outside of the ground water protection areas, well owners and operators will need to comply with Rule requirements by January 1, 2007.

**8.C. Statewide Application After Implementation in Ground Water Protection Areas and Other Sensitive Ground Water Areas**

If a State determines to first implement the Rule in ground water protection areas, then in other sensitive ground water areas, and finally the remaining areas of the State, it would follow the implementation time lines associated with the assessment for ground water protection areas and the delineation of other sensitive ground water areas (as outlined in Sections 6 and 7). The State will have met the minimum Federal requirements and can apply the Rule statewide in areas outside of ground water protection areas and other sensitive ground water areas as determined by the State.

A summary of the compliance dates for owners and operators of motor vehicles waste disposal wells located in States that determine to apply the Rule statewide is presented in Table 8.1.

Table 8.1 - Time Line for Motor Vehicle Waste Disposal Wells Located in States that Determine to Apply the Rule Statewide

State Action Item	Well Located	Owner and Operator Action	Requirement Date
Rule Implementation not Tied to Ground Water Protection Areas and Other Sensitive Ground Water Areas	Across the entire State	Apply for a permit	As specified by the State's implementation schedule
		Operate under permit conditions, or	As specified by the State's implementation schedule. The State must develop an implementation time line that is as stringent as the Federal requirements.
		Close the well	
Rule Implementation Tied to Ground Water Protection Areas and not to Other Sensitive Ground Water Areas	In ground water protection areas	Apply for a permit	Within 90 days after the local assessment completion date (recommended)
		Operate under permit conditions, or	Within 1 year after the local assessment completion date, unless granted an extension to comply (up to 1 year)
		Close the well	
	Outside of ground water protection areas	Apply for a permit	As soon as practical
		Operate under permit conditions, or	By January 1, 2007, unless granted an extension to comply (up to 1 year)
		Close the well	
Rule Implementation Tied to Ground Water Protection Areas and Other Sensitive Ground Water Areas, and then Statewide	In ground water protection areas	Apply for a permit	Within 90 days after the local assessment completion date (recommended)
		Operate under permit conditions, or	Within 1 year after the local assessment completion date, unless granted an extension to comply (up to 1 year)
		Close the well	
	In other sensitive ground water areas	Apply for a permit	As soon as practical but no later than early 2006 or early 2007 if the State receives a one-year extension to complete its assessments (recommended)
		Operate under permit conditions, or	By January 1, 2007 or January 1, 2008 (if the State receives a one-year extension to complete its assessments), unless granted an extension to comply (up to 1 year)*
		Close the well	
	Outside of ground water protection areas and other sensitive ground water areas	Apply for a permit	As specified by the State
		Operate under permit conditions, or	As specified by the State
		Close the well	

\* The one-year extension to well owners and operators is not applicable when a State is granted a one-year extension to complete its delineation of other sensitive ground water areas, that is, the last possible compliance date for affected wells located in other sensitive ground water areas is January 1, 2008.

## **SECTION 9 OTHER CHANGES TO THE UIC REGULATION**

The Class V Rule makes changes and provides clarifications in three areas that are related to the other aspects of the UIC Program:

- (A) Reclassification of radioactive waste disposal wells.
- (B) Rule authorization of hazardous Class IV wells used for site cleanups authorized under both Federal and State Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) actions.
- (C) Clarification of the plugging and abandonment requirements for Class IV and Class V wells.

In addition, the Class V Rule provides new and expanded definitions of terms relating to Class V injection practices.

### **9.A. Reclassification of Radioactive Waste Disposal Wells**

Class V radioactive waste disposal wells injecting below all USDWs have been reclassified as Class I wells (40 CFR 144.6(a) and 146.5(a)). EPA has determined that the Class I requirements related to permitting, construction, operation, monitoring, reporting, mechanical integrity testing, area of review, and plugging and abandonment are applicable to these wells. Therefore, EPA has reclassified them as Class I wells and subject them to the full set of existing Class I requirements. Such a reclassification is administratively simpler and more streamlined than keeping radioactive waste disposal wells in the Class V category and developing additional requirements (i.e., identical to the Class I requirements) under the Class V program. EPA believes that all of the reclassified radioactive waste disposal wells are located in Texas and are currently regulated as Class I wells.

The reclassification of radioactive waste disposal wells from the Class V category to the Class I category does not affect the disposal of naturally occurring radioactive material (NORM) in Class II wells as part of oil and gas field operations. The injection of fluid associated with oil and gas production, including fluids containing NORM, will continue to be regulated under existing Class II UIC regulations or under applicable regulations prescribed by the Primacy State agency.

### **9.B. Rule Authorization of Class IV Wells Used in Site Cleanup and Remediation**

The Class V Rule lifts the ban on Class IV wells if they are authorized as part of site cleanup and remediation under CERCLA and RCRA programs, or related State programs (40 CFR 144.23). If the injection wells are used to inject treated contaminated ground water (but still considered to be a

hazardous waste) into the same formation from which it was withdrawn, they are authorized by rule for the life of the wells, provided that such injection activity is approved by EPA or a State pursuant to provisions for the cleanup of contaminant releases under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 or the Resource Conservation and Recovery Act (RCRA) of 1976. If a State determines not to expand this coverage to State authorized cleanup and remediation programs, it can choose not to adopt this provision. Voluntary cleanup efforts (i.e., not covered under the CERCLA and RCRA provisions) are not allowed to operate Class IV wells for site cleanup and remediation.

### **9.C. Clarification of the Plugging and Abandonment Requirements for Class IV and Class V Wells**

The Class V Rule revises 40 CFR 146.10 by clarifying the plugging and abandonment requirements for Class IV and Class V wells. Prior to abandoning any Class IV well, the owner or operator must notify the appropriate State or EPA UIC program of their intent to abandon the well at least 30 days prior to abandonment (40 CFR 144.23(b)(3)). Then, the well owner or operator must plug or close the well in a manner acceptable to the State or EPA UIC program (40 CFR 146.10(b)).

For Class V wells (other than motor vehicle waste disposal wells and large-capacity cesspools), prior to abandoning a well, the well owner or operator must close the well in a manner that prevents the movement of fluid containing any contaminant into a USDW, if the presence of that contaminant may cause a violation of any primary drinking water regulation or may adversely affect public health (40 CFR 146.10(c)(1)). In addition, the owner or operator must dispose or manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the closed well in accordance with all applicable Federal, State, and local regulations and requirements (40 CFR 146.10(c)(2)).

### **9.D. New and Expanded Definitions**

A number of definitions have been added or modified to clarify EPA's intent in regulating Class V wells and to make the Class V Rule easier to follow (40 CFR 146.15).

**Cesspools** means a "drywell" that receives untreated sanitary waste containing human excreta, and which sometimes has an open bottom and/or perforated sides.

**Drywell** means a well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids.

**Improved Sinkhole** means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings which have been modified by man for the purpose of directing and emplacing fluids into the subsurface.

**Point of injection** for Class V wells means the last accessible sample point prior to waste fluids being released into the subsurface environment through a Class V injection well. For example, the point of injection of a Class V septic system might be the distribution box – the last accessible sampling point before the waste fluids drain into the underlying soils. For a drywell, it is likely to be the well bore itself.

**Sanitary waste** means liquid or solid waste originating solely from humans and human activities, such as wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage serving dishes, glasses, and utensils are cleaned. Sources of these waste may include single or multiple residences, hotels and motels, restaurants, bunkhouses, schools, ranger stations, crew quarters, guard stations, campgrounds, picnic grounds, day-use recreation areas, other commercial facilities, and industrial facilities provided the waste is not mixed with industrial waste.

**Septic System** means a “well” that is used to emplace sanitary waste below the surface and is typically comprised of a septic tank and subsurface fluid distribution system or disposal system.

**Subsurface fluid distribution system** means an assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground.

**Well** means a bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system.

**Well Injection** means the subsurface emplacement of fluids through a well.