Final Report

of the

SBREFA Small Business Advocacy Review Panel

on EPA's Planned Proposed Rule for Revisions to the

Underground Injection Control Regulations

for

Class V Injection Wells

April 17, 1998

Report of the Small Business Advocacy Review Panel on the Revisions to the Underground Injection Control Regulations for Class V Injection Wells

1. INTRODUCTION

This report is presented by the Small Business Advocacy Review Panel convened for the proposed rulemaking on revisions to the Underground Injection Control (UIC) regulations for Class V injection wells that the Environmental Protection Agency (EPA) is currently developing. On February 17, 1998, EPA's Small Business Advocacy Chairperson convened this Panel under section 609(b) of the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). Section 609(b) requires convening a review panel prior to publication of the initial regulatory flexibility analysis that an agency may be required to prepare under the RFA. In addition to its chairperson, the Panel consists of the Director of the Office of Ground Water and Drinking Water within EPA's Office of Water, the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget, and the Chief Counsel for Advocacy of the Small Business Administration.

This report provides background information on the proposed rule being developed and the types of small entities that would be subject to the proposed rule, describes efforts to obtain the advice and recommendations of representatives of those small entities, summarizes the comments that have been received to date from those representatives, and presents the findings and recommendations of the Panel. The complete written comments of the small entity representatives are attached to this report.

Section 609(b) of the RFA directs the review panel to report on the comments of small entity representatives and make findings as to issues related to identified elements of an initial regulatory flexibility analysis (IRFA) under section 603 of the RFA. Those elements of an IRFA are:

- A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- A description of projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule; and
- A description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

Once completed, the Panel report is provided to the agency issuing the proposed rule and included in the rulemaking record. In light of the Panel report, the agency is to make changes to the draft proposed rule, the IRFA for the proposed rule, or the decision on whether an IRFA is required, where appropriate.

It is important to note that the Panel's findings and discussion are based on the information available at the time this report was drafted. EPA is continuing to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during the remainder of the rule development process. The Panel makes its report at a preliminary stage of rule development and its report should be considered in that light. At the same time, the report provides the Panel and the Agency with an opportunity to identify and explore potential ways of shaping the proposed rule to minimize the burden of the rule on small entities while achieving the rule's statutory purposes. Any options the Panel identifies for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, environmentally sound and consistent with the statute authorizing the proposed rule.

2. BACKGROUND

Class V injection wells are generally shallow waste disposal wells, stormwater and agricultural drainage systems, or other devices used to release fluids either directly into an underground source of drinking water[1] (USDW) or into the subsurface that overlies USDWs. In some instances, such fluids contain elevated concentrations of contaminants that may endanger drinking water supplies. EPA estimates that more than one million Class V wells currently exist in the United States. These wells are located in every State, especially in unsewered areas where the population is likely to depend on ground water based drinking water supplies. Frequently, Class V wells consist of shallow holes or septic tank and leachfield combinations. While such facilities may be adequate for the treatment of sanitary waste, they may not be appropriate for the disposal of industrial wastes or other fluids, although they are sometimes used for this purpose. Some types of Class V wells may include other types of treatment systems, such as oil and water separation tanks, which are designed to treat certain types of industrial waste.

Class V wells are subject to the UIC regulations promulgated under the authority of Part C of the Safe Drinking Water Act (SDWA). Under the existing regulations, Class V wells are "authorized by rule," meaning that they do not have to obtain a permit as long as they comply with the UIC Program requirements. These regulations provide, most importantly, that Class V wells cannot allow the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of the primary drinking water

[1]According to 40 CFR 146.3 an underground source of drinking water means an aquifer or its portion: (1)(i) Which supplies any public water system; or (ii) Which contains a sufficient quantity of ground water to supply a public water system; and (A) Currently supplies drinking water for human consumption; or (B) Contains fewer than 10,000 mg/l total dissolved solids; and (2) Which is not an exempted aquifer.

regulations or may otherwise adversely affect human health. Owners or operators not in compliance with this standard may be required to close their well, get a permit, or take other actions prescribed by the UIC Program Director. Owners or operators of Class V injection wells also must submit basic inventory and assessment information.

Regulatory History

Major events in the history of this rulemaking include a Report to Congress on Class V wells published by EPA in 1987, a 1994 consent decree with the Sierra Club, a 1995 notice of proposed rulemaking (60 FR 44652, August 28, 1995), and a 1997 modified consent decree with the Sierra Club.

EPA summarized available information on 32 categories of Class V wells in a 1987 Report to Congress. This report presents a national overview of Class V injection practices and State recommendations for Class V well design, construction, installation, and siting requirements.

On December 30, 1993, the Sierra Club filed a complaint against EPA alleging that EPA failed to comply with the SDWA regarding publication of proposed and final regulations for Class V injection wells. In particular, the complaint alleged that EPA's current regulations regarding Class V wells do not meet the SDWA's statutory requirements to "prevent underground injection which endangers drinking water sources." On August 31, 1994, EPA entered into a consent decree with the Sierra Club which required that no later than August 15, 1995, the Administrator sign a notice to be published in the Federal Register proposing regulatory action with respect to Class V injection wells. In this notice, EPA was to propose additional regulations for some or all Class V injection wells or propose a decision that further rulemaking is unnecessary.

On August 15, 1995, the EPA Administrator signed a notice of proposed rulemaking intended to fulfill EPA's obligation under the 1994 consent decree with the Sierra Club. In this notice, EPA proposed not to adopt additional federal regulations for any types of Class V injection wells; instead, the Agency proposed to address the risks posed by certain wells using existing authorities and a Class V well closure and management strategy. This proposal reflected a determination, based on data available at that time, that existing regulations coupled with an effective nationwide enforcement initiative were adequate to protect USDWs.

The Sierra Club Legal Defense Fund submitted comments on the 1995 proposed Class V rule alleging that the proposal violates the SDWA and fails to carry out statutory requirements. As a result, EPA and the Sierra Club entered into a modified consent decree on January 28, 1997, that extended the dates for rulemaking in the Decree. The modified Decree requires three actions. First, by no later than June 18, 1998, the EPA Administrator must sign a notice proposing to fully discharge the Agency's rulemaking obligation under the SDWA with respect to Class V injection wells determined to be highest risk and for which additional study is not necessary (by July 31, 1999, EPA must take final action on this proposal). Second, by no later than September 30, 1999, EPA must complete a study of all Class V wells not included in the rulemaking on high-risk Class V injection wells. Third, by no later than April 30, 2001, the EPA Administrator must sign a notice proposing to discharge EPA's rulemaking obligations under the SDWA with respect to all Class V injection wells not included

in the rulemaking on high-risk Class V injection wells (by May 31, 2002, EPA must take final action on this proposal). The proposed rule addressed in this notification is being developed in response to the first required action listed above.

Identification of High Risk Wells

In this rulemaking, EPA is proposing to regulate high risk wells by focusing on certain wells located near ground water-based drinking water supplies. The 1996 Amendments to the SDWA make source water protection a national priority. Source water protection areas, to be defined by States in accordance with the 1996 Amendments, will identify those areas considered most critical for the protection of public drinking water supplies. The proposed Class V rule would help achieve this protection by establishing additional federal requirements for three categories of Class V wells in source water protection areas which EPA currently believes may present the highest risk to USDWs. These categories are: (1) motor vehicle waste disposal wells; (2) industrial wells; and (3) large-capacity cesspools.

Motor Vehicle Waste Disposal Wells

EPA is considering banning motor vehicle waste disposal wells in delineated source water protection areas. Such a strategy would be based on EPA's current belief that these wells have a high potential to endanger USDWs. Class V motor vehicle waste disposal wells are located in every State in the country -- mainly in populated areas -- at a variety of automotive-related facilities. EPA believes that these wells tend to be uncased, which would allow contaminated fluids to move more easily into USDWs.

EPA further believes that many wells at motor vehicle-related facilities perform little or no treatment of injected fluids such as spilled gasoline and oil, waste oil, grease, engine cleaning solvents, brake and transmission fluids, and antifreeze. These fluids contain potentially harmful contaminants, often in high concentrations. Data collected for the 1987 Report to Congress, from later EPA Regional investigations, and from a national study in 1991 indicate that fluids being injected may exceed health-based limits for contaminant levels in drinking water by 10 to 100 times. It is not known, however, the extent to which such fluids may now be recycled and/or properly disposed of off-site in accordance with best management practices (BMPs) that have been developed by the automotive industry over the past decade. Some commenters believe that the use of such BMPs is now widespread. EPA expressed concern that BMPs would not fully account for spill or leak scenarios.

Although limited data exists on the extent to which BMPs are used at Class V motor vehicle wells, EPA believes that banning motor vehicle waste disposal wells in source water protection areas represents a preventative approach that would fulfill the statutory mandate to protect USDWs.

Class V Industrial Wells

Some Class V industrial process water and waste disposal wells may endanger USDWs because of the low quality and large volumes of waste injected. According to the 1987 Report to Congress, such wells could receive any fluid disposed of by the various industries and commercial entities that use Class V wells, including

those engaged in commercial printing, die and tool manufacturing, machinery and equipment manufacturing, chemical production, and dry cleaning.

A subset of Class V industrial wells are drainage wells that are intended to receive storm water but may be used to dispose of industrial fluids. These wells may pose a high threat of contamination to USDWs because of the potentially poor quality of injection fluids, susceptibility to accidental industrial spills, and availability for abuse through illicit discharges. Studies from the Nationwide Urban Runoff Projects in Fresno, CA and Spokane, WA, conducted in 1984 and 1986 found that industrial areas had the lowest quality stormwater runoff of all land-use types evaluated.

EPA is considering a strategy that would require owners or operators of Class V industrial wells in source water protection areas to either (1) make sure fluids disposed of in their wells meet primary drinking water maximum contaminant levels (MCLs) at the point of injection, or (2) close their wells.

EPA is still considering which industry sectors belong in this category. If EPA determines, based either on current data or on new data received from commenters, that Class V wells in certain industry sectors do not pose a high risk to USDWs, even when located in a source water protection area, it will place these wells in an "other industrial wells" category for further study and not include them in the "industrial wells" category addressed in this rulemaking. The National Funeral Directors Association has submitted data suggesting that such an approach may be appropriate for Class V septic systems operated by funeral homes.

Large-capacity Cesspools

Cesspools receive and allow untreated sanitary waste to percolate directly into the shallow subsurface. Only those cesspools with the capacity to serve 20 or more persons per day are subject to UIC regulation. Such large-capacity cesspools have a high potential to contaminate USDWs because: (1) sanitary wastes released in cesspools frequently exceed drinking water MCLs for nitrates, total suspended solids, and coliform bacteria; (2) the wastes also contain other constituents of concern, including phosphates, chlorides, grease, viruses, and chemicals used to clean cesspools such as trichloroethane and methylene chloride; and (3) cesspools provide no treatment except for some settling of the solids. In addition, EPA's 1987 Report to Congress notes that some States have reported degradation of USDWs from such cesspools. Based on these concerns, new cesspools are already banned in most states.

In this rulemaking, EPA is considering proposing new federal requirements which EPA believes will strengthen programs to protect USDWs from pollution by a ban on both new and existing large-capacity cesspools in source water protection areas. These cesspools represent perhaps the clearest case of high risk wells that can be addressed without further study, as specified in the consent decree with the Sierra Club discussed above.

3. OVERVIEW OF CLASS V PROPOSAL UNDER CONSIDERATION

Class V wells are currently authorized by rule as long as (1) they do not endanger USDWs, and (2) the well owners or operators submit basic inventory and assessment information. If a Class V well may cause a violation of drinking water standards, UIC Program Directors in EPA Regions or States can require the injector to apply for a permit, order preventive actions (including closure of the well) to prevent the violation, require remediation to assure USDWs are protected, or take enforcement action. These and other existing federal requirements and authorities will continue as basic elements of EPA's Class V strategy, applicable to all Class V wells in all areas.

EPA is considering a three-pronged approach to supplement the existing program and ensure Class V injection wells do not endanger USDWs. This expanded strategy is being developed to resolve major issues raised in public comments on the 1995 proposal, to protect USDWs in designated source water protection areas, to embrace priorities and help achieve goals defined under the 1996 Amendments to the SDWA, and to fulfill the Agency's responsibilities under the 1997 consent decree with the Sierra Club. The three prongs are: (1) an initial rule creating additional requirements for high-risk Class V wells in ground water-based source water protection areas that can be addressed without further study; (2) further study of other types of Class V wells not covered in the initial rule; and, 3) further regulatory action, as necessary.

The current rulemaking is the first prong of this Class V strategy. As discussed above, EPA is considering new requirements for motor vehicle waste disposal wells, industrial wells, and large-capacity cesspools, each of which EPA currently believes fall into the category of high risk wells that do not require additional study. The new requirements would be targeted to such wells in source water protection areas delineated for community water systems and non-transient non-community water systems that use ground water as a source of drinking water.

Requirements Being Considered for Motor Vehicle Waste Disposal Wells

EPA is considering a ban on motor vehicle waste disposal wells in delineated source water protection areas. Starting one year from the effective date of the rule, owners or operators of such existing wells would be required to cease injection operations and close their well within 90 days of the completion of the local source water assessment program for their area. This timeframe is designed to give owners or operators of existing wells a reasonable amount of time to close their wells and implement alternative waste management methods. New motor vehicle waste disposal wells, and new conversions to such wells, in those delineated areas would be prohibited starting on the effective date of the rule. If a State has not completed its source water assessment program by May 2003, the ban would apply throughout the State.

EPA is endeavoring to design the proposed ban on motor vehicle waste disposal wells to be self-implementing by owners or operators, with minimal new reporting requirements and no new inspection or other administrative requirements. Under the current draft proposal, owners or operators of existing motor vehicle waste disposal wells in affected areas would have to close their wells within one year of the effective date of the rule or 90 days of the completion of the local source water assessment program for their area, whichever is later. For drinking water programs administered by EPA, also known as Direct Implementation (DI) Programs,

owners or operators of wells being closed would be required to notify the UIC Program Director of their intent to close their well at least 30 days prior to closure. This would be identical to the notification requirement for Class IV wells regulated by DI Programs, specified in 40 CFR section 114.23(b)(3). Owners or operators of wells in Primacy States would have to meet any existing State-established reporting requirements.

For some owners or operators of motor vehicle waste disposal wells, well closure would entail sealing floor drains or disconnecting them from existing wells. Owners or operators would be required to plug or otherwise close the well in a manner acceptable to the UIC Program Director prior to abandoning the well. This closure requirement would be similar to the one that exists in section 144.23(b)(1) for Class IV wells. The existing requirement in section 144.12(a) also would continue to apply, which prohibits owners or operators from plugging and abandoning a well in a manner that allows the movement of fluid into USDWs. Remediation -- defined as removal of piping, septic tank, and/or contaminated soil and installation of ground water monitoring wells -- would not be required as part of closure under the proposal being considered, but may be required under other existing laws or regulations depending on the nature and extent of soil or ground water contamination (if any) caused by the well operation. EPA recognizes that, as a practical matter, the new rule may trigger remediation that otherwise would not have occurred, and, therefore, will factor the costs of such remediation into its economic analysis of the rule. In addition, any wastes generated during well closure or under alternative waste management scenarios after the wells are closed (e.g., spent cleaning solutions and absorbents) would have to be managed in accordance with all existing statutes and regulations. EPA is in the process of drafting Class V well closure guidance that is scheduled to be available by the time the final rule is promulgated. This guidance will provide more detail on how to close disposal wells used by motor vehicle-related facilities.

These new requirements would be consistent with guidance developed by the American Petroleum Institute recommending that oil companies and service stations eliminate the use of Class V wells to dispose of motor vehicle-related waste ("Handling Water Discharges from Automotive Service Facilities Located at Petroleum Marketing Operations," API Recommended Practice 1633, January 1992). It would also be consistent with requirements currently being implemented by some State UIC Programs. For example, the State of Connecticut has published a guidebook for local officials with regulatory responsibility for Class V wells ("Best Management Practices for the Protection of Ground Water," November 4, 1992) recommending that all discharges from existing wells at automotive repair and service facilities to other than a sanitary sewer be prohibited, and that discharges at new or expanded facilities in wellhead protection areas also be prohibited. New Hampshire also disallows discharges into floor drains at automotive facilities.

Requirements Being Considered for Class V Industrial Wells

EPA is considering requirements for owners or operators of existing Class V industrial wells in source water protection areas, for community water systems and non-transient non-community water systems that use ground water as a source, to either (1) make sure fluids disposed of in their wells meet drinking water MCLs at the point of injection, or (2) close their wells. New wells in such areas, including new conversions to Class V industrial wells, would be prohibited unless they were able to meet the same standard on injectate quality. UIC Program Directors would retain their existing discretion to require the injectate to meet other appropriate health-

based limits for contaminants for which no MCL has been promulgated, as needed to protect USDWs. Industrial well closures would be subject to the same basic closure requirements being considered for motor vehicle waste disposal wells, including the requirement that owners or operators in DI Programs submit pre-closure notification at least 30 days prior to closure.

The timing for these new requirements would be the same as that proposed for motor vehicle waste disposal wells. Starting one year from the effective date of the rule, existing wells would have to meet the MCLs or close within 90 days of the completion of the source water assessment program for their local area. This timeframe is designed to give owners or operators of existing wells a reasonable amount of time to comply with the new requirements. The requirements for new and converted industrial wells would be effective immediately on the effective date of the rule.

Requirements Being Considered for Large-capacity Cesspools

EPA is considering banning new large-capacity cesspools in delineated source water protection areas (defined as those having the capacity to serve 20 persons or more per day) starting on the rule's effective date. Existing large-capacity cesspools in such areas would have to be phased out within five years of the effective date of the rule. Owners or operators of such cesspools in DI Programs would have to notify the UIC Program Director of the intent to abandon their cesspool at least 30 days prior to abandonment. Owners or operators of large-capacity cesspools in Primacy States would have to meet any State-established reporting requirements. Cesspool closures would be subject to the same basic closure requirements being considered for Class V motor vehicle waste disposal and industrial wells.

4. APPLICABLE SMALL ENTITY DEFINITIONS

To define small entities, EPA used the Small Business Administration (SBA) industry-specific criteria published in 13 CFR section 121. SBA size standards have been established for each type of economic activity under the Standard Industrial Classification (SIC) System. These criteria are usually expressed in terms of number of employees or dollar volume of sales.

To determine the affected small entities, EPA developed a list of SIC codes containing industries that might be subject to the proposed rule; development of this list is described in Section 5 below. For the purposes of the Initial Regulatory Flexibility Analysis, SIC codes in which at least 90 percent of the firms met the SBA definition of a small business were treated as if they consisted entirely of small businesses, while those in which less than 90 percent of the firms met the SBA definition were divided into large and small firms and the large firms excluded from the analysis. During the Panel review, SBA expressed concern that this methodology may not adequately capture the effects of the rule on different size categories of small businesses within an SIC code. SBA is particularly concerned that the potentially significant effects on the smallest firms may be overlooked by an approach that looks only at the “average” effects on all small firms within a sector. This problem is exacerbated by the inclusion of large firms in the analysis as well for many SIC codes.

5. INDUSTRIES THAT MAY BE SUBJECT TO THE PROPOSED REGULATION

The rule being considered would affect owners and operators of three categories of Class V injection wells in source water protection areas delineated for community water systems and non-transient non-community water systems that use ground water as a source.[2] The three categories of Class V wells that would be subject to the proposed rule under the current draft are:

- *Motor vehicle waste disposal wells* that receive or have received fluids from 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 MCLs established by the primary drinking water regulations. These fluids also may include waste petroleum products and contaminants such as heavy metals and volatile organic compounds. Such contaminants may endanger USDWs.

- *Industrial wells* that are used to inject certain non-hazardous industrial or commercial wastes and fluids to be defined in the proposed Class V rule. (Note that shallow wells injecting hazardous waste are classified as Class IV wells and are already prohibited.) These might include:

  -- Wastewater from grocery stores, chemical manufacturers, dry cleaners, electric component manufacturers, small machine manufacturers, die and tool manufacturers, commercial printers, asphalt manufacturers, other industrial operations, and carwashes where engine or undercarriage washing is performed; or

  -- Stormwater runoff contaminated by spills from industrial or commercial process areas, storage areas, or loading docks.

- *Large-capacity cesspools* that receive untreated sanitary waste. The UIC regulations apply only to cesspools that have the capacity to dispose of sanitary waste from 20 persons or more per day. Many such cesspools are located at State campgrounds and parks in areas not served by sanitary sewers, others may be found at rest stops and trailer parks.

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[2] As defined in the drinking water regulations, a "community water system" is a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A "non-transient non-community water system" is a public water system that is not a community water system and that regularly serves at least 25 of the same people over six months a year. Non-transient non-community water systems may include systems that provide water to day care centers, government/military installations, manufacturers, hospitals or nursing homes, office buildings, schools, and other facilities.

In order to formulate a list of the industries that operate Class V wells potentially subject to the proposed rule, EPA developed a list of SIC codes that capture the universe of facilities that possibly could have motor vehicle waste disposal wells and industrial wells. Injection well inventory data from six states (West Virginia, Kansas, Nebraska, New Hampshire, Illinois, and Montana), as well as data from EPA Region 3 (including data on Pennsylvania and Virginia), were reviewed to determine the SIC codes associated with industrial disposal wells, automotive service station wells, and cesspools. An SIC code was included in the list of affected industries if it appeared at least one time in at least three of the State inventories. Additional SIC codes judged to be applicable were also added to this list.

This initial list was then pared down to reflect the number of facilities that may be actually affected by the proposed rule. EPA eliminated from the list those facilities that would be outside the scope of the rule, including:

(1) Facilities connected to sewers (which presumably would not dispose of wastewater in injection wells);

(2) Facilities located in States that have already banned types of Class V wells that would be targeted by the proposal;

(3) Facilities injecting wastewater likely to qualify as hazardous waste (in which case, the well is a Class IV well and already banned under the existing UIC regulations); and

(4) Facilities located outside source water protection areas delineated around community water systems and non-transient non-community water systems that use ground water (only wells inside such areas would be subject to the proposal).

Although States have the flexibility to delineate their source water protection areas in a variety of ways, EPA believes that such areas delineated for ground water supply sources will be similar to wellhead protection areas already delineated in most places. A total of 43 States and 2 Territories have EPA-approved Wellhead Protection Programs. Most of these programs have defined wellhead protection areas using a fixed radius around water supply wells.

Given this situation, EPA determined the number of facilities likely to fall within source water protection areas by estimating the number of facilities likely to fall within a fixed radius of existing supply wells. Based on data from the State Wellhead Protection Plans, it was assumed that the typical protection area will be a half-mile radius around community ground water supply wells and a quarter-mile radius around non-transient non-community ground water supply wells. Using these areas and current data on the number of supply wells in each State, EPA estimated the land area in each State likely to fall within a source water protection area targeted by the proposal. That area was then divided by the total land area in the State to estimate the fraction of land in each State likely to be in a source water protection area. Finally, the number of potentially affected facilities was estimated by multiplying that fraction by the total number of facilities in each State estimated to have a Class V motor vehicle waste disposal well or industrial well that would be subject to the proposal. This approach

assumes that the Class V wells are distributed evenly across each State. (The appropriateness of this assumption was discussed by the Panel; see Section 9: Panel Findings and Discussion below.)

Table 1 summarizes the results of this analysis for each potentially affected SIC code, it provides the corresponding SBA size threshold and the estimated number of small facilities potentially subject to the rule.

Table 1
Small Businesses Potentially Subject to the Class V Proposal Under Consideration

SIC Code	Description	No. of Facilities	SBA Size Threshold [1]	Percentage Small [2]	No. of Small Facilities
Industrial Wells					
0742	Veterinary services for animal specialties	24	$5.0	94.6%	22
1521	General contractors - single family houses	131	$17.0	100.0%	131
1541	Industrial buildings & warehouses	8	$17.0	100.0%	8
1611	Highway and street construction (not elevated)	12	$17.0	100.0%	12
1711	Plumbing, heating and air conditioning	92	$7.0	99.0%	91
1794	Excavation work	18	$7.0	98.2%	18
2752	Commercial printing, lithographic	34	500	99.8%	33
2759	Commercial printing, nec	10	500	100.0%	10
3089	Plastics products, nec	10	500	99.3%	10
3599	Industrial and commercial machinery & equipment, nec	27	500	100.0%	27
4911	Electric services	6	$10.0 [3]	31.9%	2
4953	Refuse systems	4	$6.0	91.4%	4
5012	Automobiles and other motor vehicles	13	100	97.6%	13
5013	Motor vehicle supplies and new parts	25	100	98.5%	24
5063	Electrical apparatus and equipment, wiring supplies & construction materials	19	100	98.3%	19
5082	Farm & garden machinery and equip.	5	100	95.8%	5
5083	Construction and Mining (except Petroleum) Machinery and Equipment	13	100	99.5%	13
5084	Industrial machinery and equipment	32	100	98.7%	32
5085	Industrial supplies	17	100	98.2%	16
5087	Service establishment equipment	9	100	99.0%	9
5169	Chemicals and allied products, nec	10	100	98.0%	10
5172	Petroleum and petroleum products wholesalers exc. bulk stations and terminals	7	100	98.5%	6
5261	Retail nurseries and garden stores	30	$5.0	99.2%	30
5411	Grocery stores	143	$20.0	98.9%	141
5551	Boat dealers	6	$5.0	96.2%	5
5941	Sporting goods and bicycle shops	25	$5.0	98.7%	24
5983	Fuel oil dealers	12	$9.0	97.5%	12
5999	Miscellaneous retail stores, nec	46	$5.0	97.7%	45
7261	Funeral service and crematories	19	$3.5	99.5%**	19
7389	Business services, nec	61	$5.0	97.9%	59
7542	Carwashes	13	$5.0	99.8%	13
7692	Welding repair	6	$5.0	99.7%	6
7694	Armature rewinding shops	3	$5.0	97.4%	3
7699	Repair shops and related services, nec	38	$5.0	99.0%	38
7999	Amusement and recreation, nec	25	$5.0	98.4%	25
8062	General medical and surgical hospitals	1	$5.0	21.4%	0
8211	Elementary and secondary schools	132	$5.0	70.5%	93
8734	Testing laboratories	5	$5.0	95.1%	5
9224	Fire Protection	23	$5.0	97.0%	22
Automotive Service Station Wells					
4142	Bus charter service, except local	10	$5.0	95.3%	10
4212	Local trucking, without storage	327	$6.0	99.3%	325
4213	Trucking, except local	263	$18.5	98.7%	260
4581	Airports, flying fields, and airport terminal services	18	$5.0	93.9%	17
5015	Motor vehicle parts, used	88	$5.0	99.9%	88
5511	Motor vehicle dealers (new and used)	165	$17.0	83.9%**	138
5521	Motor vehicle dealers (used only)	143	$11.5	99.9%**	143
5531	Auto and home supply stores	293	$5	98.8%	289

SIC Code	Description	No. of Facilities	SBA Size Threshold [1]	Percentage Small [2]	No. of Small Facilities
5541	Gasoline service stations	665	$4.5	98.2%**	653
7514	Passenger car rental	41	$18.5	98.6%	40
7515	Passenger car leasing	8	$18.5	100.0%	8

Table 1
Small Businesses Potentially Subject to the Class V Proposal Under Consideration

SIC Code	Description	No. of Facilities	SBA Size Threshold [1]	Percentage Small [2]	No. of Small Facilities
7532	Top, body and upholstery repair shops and paint shops	268	$3.5	99.8%**	268
7533	Auto exhaust system repair shops	42	$5.0	99.5%	42
7537	Automotive transmission repair shops	43	$3.5	100.0%**	43
7538	General automotive repair shops	449	$3.5	99.9%**	449
7539	Automotive repair shops, nec	67	$3.5	99.8%**	67
7549	Automotive services, except repair and carwashes	73	$3.5	99.4%**	72
9111	Executive offices	200	50,000	97.0%	194
Totals		**4,275**			4,162

[1] SBA size thresholds from 13 CFR 121. Units in millions of dollars or number of employees.
[2] For each SIC code, the Percentage Small equals the number of businesses that are small (below SBA threshold) divided by all businesses.
[3] SBA threshold for electric services is 4 million megawatt-hours. There were insufficient data available on the generating capacity of a representative sample of the industry so an alternate threshold of $10,000,000 was used.

** Percent calculated with a threshold lower than that used by SBA. Actual percent is the same or higher.

6. SUMMARY OF SMALL ENTITY OUTREACH

EPA has sought and obtained input from States, local government entities, and industries throughout the development of the Class V UIC regulations. For the purpose of this summary, the outreach activities can be divided into two major timeframes: prior to and subsequent to the 1995 proposal.

Outreach Conducted Prior to the 1995 Proposal

Rule development activities prior to the 1995 proposal included regular coordination with State and EPA Regional staff. Since these staff are the key points of contact for most businesses that are regulated under Class V requirements, they have first-hand knowledge of the kinds of concerns those businesses can be expected to have. These staff conducted outreach to the regulated community (a large percentage of which is small businesses) to solicit opinions about the modifications to the Class V UIC program that EPA was planning to propose. Small entities targeted by this outreach included auto dealers and service stations (Region II). The outreach methods included asking State auto service station associations to assist in the design of Class V permits (New Jersey) and having EPA Regional UIC staff meet with members of national associations to explain the purpose of the program and alternatives to the use of Class V wells (North Carolina).

At the same time, EPA rule development staff reached out directly to representatives of small businesses that own or operate Class V wells. EPA also convened "light" industry focus groups that included representatives from the automotive service, petroleum marketing, funeral, photofinishing, and metal finishing industries, among others. At these meetings, EPA sought input to identify innovative implementation strategies for management of Class V wells that could be incorporated into the rule. For example, EPA asked for input on

best management practices that could be undertaken by various industries to accomplish the goal of a reduction in risk to USDWS at the lowest cost to businesses.

Outreach Conducted Subsequent to the 1995 Proposal

The 1995 proposal itself provided an opportunity for input by small entities. EPA received 57 public comment letters, many of which were from small businesses or associations that represent small businesses, including the National Automobile Dealers Association, the Petroleum Marketers Association, and the Society of Independent Gasoline Marketers of America. The comments provided input and ideas in response to EPA's proposed Class V strategy as well as the specific comment solicitations spelled out in the preamble.

Since that time, EPA has conducted outreach directly to representatives of small entities that would be affected by the proposed rule as required by SBREFA. EPA, in consultation with SBA, identified 17 representatives of small entities that were most likely to be affected by the proposed rule. In December, 1997, EPA prepared an outreach brochure titled "Possible Changes to Class V UIC Requirements: Information for Owners and Operators of Class V Injection Wells." This brochure was distributed to the small entity representatives and EPA convened a two-hour conference call with these representatives on January 15, 1998. Also in January, 1998, EPA presented the new Class V draft proposed requirements to the SBA Environmental Roundtable.

In addition, EPA has been convening stakeholder meetings to inform potentially affected entities, including small businesses, of the requirements under consideration for the proposed rule and to solicit feedback. To date, EPA has held three stakeholder meetings, one in Washington, DC, on January 20, 1998, one in Chicago, IL on January 27, 1998, and one in San Francisco, CA on February 19, 1998.

7. SMALL ENTITY REPRESENTATIVES

EPA, in consultation with the Small Business Administration, invited the following 17 small entity representatives (SERs) to participate in its outreach efforts on the UIC Class V proposal being considered. Many of these representatives have also submitted written comments.

Auto Service Industry

Ralph Bombardiere
Gasoline and Automotive Service Dealers Association
New York Association of Service Stations

Doug Greenhaus
National Automobile Dealers Association

Matthew Brown
Automotive Service Association

Jeffrey Leiter
American Rental Car Association

Frank Tabish
Tabish Brothers Distribution
Kalispell, MT

Steve Hensely
American Trucking Associations

Petroleum Products Industry

John Huber
Petroleum Marketers Association of America

Jeffrey Longsworth
Society of Independent Gasoline Marketers of America

Heating and Air Conditioning Industry

Anthony Bodell
Independent Electrical Contractors

Angie Conway
Air Conditioning Contractors of America

Other Industries

Susan Asmus
National Association of Home Builders

Ben Cooper
Printing Industries of America

Christine Corcoran
National Grocers Association

Tracy Alaimo Mattson
Institute of Scrap Recycling Industries

Nora Nellis
The Neighborhood Cleaners Association

Jill Zucker
National Funeral Directors Association

Local Government Entities

Diane Shea
National Association of Counties

Tom Halicki
National Assoc. of Towns and Townships

8. SUMMARY OF INPUT FROM SMALL ENTITY REPRESENTATIVES

The Office of Ground Water and Drinking Water (OGWDW) received 11 sets of written comments from SERs prior to the convening of the Panel on February 17, 1998. In addition, oral comments were provided to OGWDW during a telephone conference call on January 15, 1998. Copies of all written comments and a summary of the conference call were provided to all Panel members by OGWDW. Six additional sets of written comments from SERs were received by the Panel after it convened. The Panel also conducted outreach through a face-to-face meeting with the SERs on March 5, 1998, in Washington, DC. A list of all written comments received by both OGWDW and the Panel is provided in Table 2 below. Summaries of the SERs' oral comments from the January 15 conference call and the March 5 meeting, as well as of the 17 sets of written comments are contained in Appendix A. The complete written comments are provided in Attachment A.

Table 2: List of SER Written Comments

Name	Organization	Date Received	Number of Pages
OGWDW Outreach			
Jeffrey Longsworth Jeffrey Leiter	Society of Independent Gasoline Marketers of America	1/14/98	7
Jill Zucker	National Funeral Directors Association	1/15/98	3
Frank Tabish	Tabish Brothers Distribution	1/23/98	1
Dick Taylor	Big O Tires	1/24/98	3
Jeffrey Longsworth Jeffrey Leiter	Society of Independent Gasoline Marketers of America (second set)	1/30/98	8
Tracy Alaimo Mattson	Institute of Scrap Recycling Industries	1/30/98	5
Ralph Bombariere	NY State Association of Service Associations and Repair Shops	1/29/98	1
John J. Huber	Petroleum Marketers Association of America	2/2/98	2
Doug Greenhaus	National Automobile Dealers Association	2/3/98	4
Jeffrey Longsworth Jeffrey Leiter	American Car Rental Association	2/10/98	5
Steve Hensley	American Trucking Associations	1/30/98	13

Name	Organization	Date Received	Number of Pages
Panel Outreach			
Jill Zucker	National Funeral Directors Association	3/18/98	2+ Attachment
Jeffrey Leiter Jeffrey Longsworth Ann-Marie Carrington	Society of Independent Gasoline Marketers of America	3/19/98	5
Jeffrey Leiter Jeffrey Longsworth Ann-Marie Carrington	American Car Rental Association	3/19/98	5
Steve Hensely	American Trucking Associations	3/16/98	1+ Attachment
Doug Greenhaus	National Automobile Dealers Association	3/20/98	4+ Attachments
Ralph Bombardier	NY State Association of Service Associations and Repair Shops	3/27/98	2

9. PANEL FINDINGS AND DISCUSSION

9.1 Major Topics of Panel Discussion

9.1.1 Basis for Regulation

A number of commenters suggested that the existing UIC program, in conjunction with EPA's 1995 Proposal to address high risk Class V wells through a management and closure strategy using existing authorities, is adequate to protect USDWs. These commenters believe that state, local, and regional authorities already have ample authority to deal with problem wells and support the continued flexibility of these authorities to address Class V wells on a site-specific basis. These commenters believe that additional regulation requiring automatic closure of certain wells is redundant and unnecessarily limits that flexibility. Several commenters also stated that wells currently classified as Class V wells that are injecting hazardous waste should be reclassified as Class IV wells, which are already prohibited under existing regulations. They believe this would be more appropriate than imposing new closure requirements on legitimate Class V wells.

EPA now believes that the 1995 proposal on Class V injection wells was inadequate to protect USDWs for two main reasons. First, the 1995 approach proposed to address all Class V wells regardless of the level of risks they pose to USDWs, with one approach. This proposed approach failed to account for the wide range of risks posed by the varied universe of Class V wells. As a result, the proposed rule did not adequately address high risk wells that threaten public drinking water supplies. EPA now believes that specific regulatory requirements are necessary to control the risks posed by industrial waste disposal wells, motor vehicle waste disposal wells and large capacity cesspools in delineated source water protection areas. This belief was echoed in public comment received on the proposed rule and in recent stakeholder meetings. Second, EPA believes that the 1995 proposed rule did not provide for consistent public health protection nationwide because it did not establish a clear baseline program for States to follow and, therefore, even though the authority exists, States could allow inadequate controls in those situations where there is inadequate information and/or inadequate resources to address Class V wells.

The Panel did not reach consensus on this issue. Despite the concerns raised by EPA and many commenters on the 1995 proposal, some Panel members believe that EPA has little new information to suggest that its earlier proposed approach of addressing the risk from Class V wells through existing authorities combined with a management strategy to speed up well closures and promote the use of BMPs, is inadequate. These Panel members urged EPA to consider expanding its current permit-by-rule approach to require the use of appropriate management practices while maintaining the flexibility of state UIC programs to tailor their programs to local conditions. For example, required management practices for automotive facilities would include the elimination of solvents, used oil, and waste antifreeze from these wells. These Panel members question whether EPA has adequately examined automotive facilities currently employing such practices, or adequately modeled the fate and transport of the remaining lower quantity higher quality injectate, to determine if Class V wells at such facilities endanger USDWs.

9.1.2 Characterization of Motor Vehicle and Industrial Wells in SWPAs as High Risk

Some commenters questioned whether EPA has adequate data to support its blanket characterization of all Class V motor vehicle wells and industrial wells in SWPAs as "high risk" wells that do not require further study. These commenters believe that many such wells do not pose significant risk to USDWs and that in general the risk of individual wells can only be determined through consideration of site specific factors, such as soil hydrology, depth of water table, quality of injectate, and distance to drinking water intakes. Some Panel members expressed concern that EPA's data regarding contamination of USDWs from such wells consists largely of individual case studies, rather than a systematic statistical correlation between injection in such wells and contamination of USDWs.

EPA's evaluation of the risk from such wells is based on the combined professional judgement of EPA and State geologists and engineers that are responsible for implementing the Class V UIC program. The risk associated with these wells is discussed in numerous reports and studies. In 1987 the EPA completed a Report to Congress (RTC) on Class V injection wells. This report was based on information and data, provided by States, on all types of Class V wells. The RTC concluded that motor vehicle waste disposal wells and industrial waste injection wells pose a high potential to contaminate underground sources of drinking waters. This conclusion is supported by a number of other information sources including contamination studies performed by the State regulators, environmental sampling data obtained from Class V well closures, and various outreach documents published by States. Finally, EPA's position that motor vehicle waste disposal wells should be banned is consistent with guidance put out by the American Petroleum Institute recommending that such wells be closed (*Handling Water Discharges from Automotive Service Facilities Located at Petroleum Marketing Operations*, by the American Petroleum Institute, API Recommended Practice 1633, First Edition, January 1992).

The Panel received comments from four small entity representatives which indicated that over the past decade, many industrial facilities, and service stations and repair shops in particular, have adopted best management practices (BMPs), such as recycling of used motor oil and antifreeze, spill prevention and control, and use of environmentally friendly cleaning products, that have significantly reduced both the volume and the toxicity of their injectate. These commenters asserted that the use of such practices is now widespread in the automotive service industry. One of the same Small Entity Representatives did agree that EPA had "picked the right set of wells to focus on," however, he opposed categorical closure of automotive waste disposal wells in source water protection areas. Some Panel members expressed concern that the EPA's current proposal to close all Class V motor vehicle wells in SWPAs is not based on actual data documenting endangerment from properly operated wells using current BMPs. These Panel members suggested that EPA consider an alternative approach based on the required use of BMPs, appropriate treatment, and assessment of endangerment potential on a site-specific basis. In response, EPA developed two alternative options for motor vehicle wells that would not require automatic well closure and agreed to consider them. These are discussed in the Regulatory Alternatives section below.

9.1.3 Requirement for Industrial Well Injectate to Meet MCLs at the Point of Injection

The Panel discussed EPA's interpretation of the statutory requirement to promulgate regulations containing minimum requirements for effective State UIC programs to prevent underground injection which endangers drinking water sources (SDWA Sec 1421 (b)(1)). In the current rulemaking, EPA is proposing to satisfy this requirement by prohibiting injection by Class V industrial wells located in source water protection areas (SWPAs) unless the injectate meets all MCLs at the point of injection. Some members of the Panel questioned whether this was necessary, and suggested that EPA consider the possibility of allowing the injectate to meet some higher multiple of the MCL (e.g., 10 or 100 times the MCL) for certain contaminants under certain conditions, in recognition of the fact that some contaminants are significantly attenuated by percolation through the soil prior to reaching the water table, and most are diluted within an aquifer prior to reaching a public water system. In addition, many existing wells are designed in accordance with state and local requirements to treat wastes before releasing them into the soil. These Panel members suggested that for such contaminants (e.g., metals, which generally do not travel far from the point of injection unless injected directly into the water table), EPA should try to identify conditions (e.g., soil type, water table depth, distance to nearest drinking water well) that would allow injection of contaminants that exceeds the MCL by a specified amount without endangering drinking water sources. To be workable, such conditions would have to be easily verifiable.

EPA believes that its proposed approach to regulate cesspools, automotive service station wells and industrial wells is consistent with its long-standing interpretation of the statutory requirements to assure the protection of underground sources of drinking water. The Class V wells addressed in this proposed rule are used to inject waste either directly into or above USDWs. EPA also believes that developing a set of conditions within which a Class V well owner or operator could inject waste that exceeds drinking water standards without endangering drinking water sources would not be a viable option for most small entities because of the difficulty and expense involved in collecting the site-specific hydrologic, geologic, and soil information necessary to determine if waste, above the MCL, could be injected without endangering the underlying USDW. Additionally, EPA questions whether it would be possible to develop such conditions because of the difficulty of anticipating certain events (such as high volume spills, illicit discharges, the siting of new drinking water supplies wells, and, improper system maintenance) that could endanger underlying USDWs.

The SDWA Sec 1421 (d)(2) specifically states that, "Underground injection endangers drinking water sources if such injection may result in the presence in underground water which supplies or can reasonably be expected to supply any public water system of any contaminant, and if the presence of such contaminant may result in such system's not complying with any national primary drinking water regulation or may otherwise adversely affect the health of persons." EPA noted that Congress, in establishing this endangerment standard, intended that the definition be "liberally construed so as to effectuate the preventive and public health protective purposes of the bill." (A Legislative History of the Safe Drinking Water Act, Committee Print February, 1982, at 564.) More specifically, in defining endangerment, the legislative history states that :

> It is the Committee's intent that the definition be liberally construed so as to effectuate the preventative and public health purposes of the bill. The Committee seeks to protect not only currently-used sources of drinking water, but also potential drinking water sources for the future.

> Injection which causes or increases contamination of such sources may fall within this definition even if the amount of contamination which may enter the water source would not by itself cause the maximum allowable levels to be exceeded. The definition would be met if injected material were not completely contained within the well, if it may enter either a present or potential threat to human health or render the water source unfit for human consumption. In this connection, it is important to note that actual contamination of drinking water is not a prerequisite either for the establishment of regulations or permit requirements or for the enforcement thereof.

The Panel could not reach consensus on how to address this issue. OMB and SBA recommend that EPA solicit comment in the preamble to the proposed rule on the appropriateness of allowing injectate from Class V industrial wells in source water protection areas to exceed the MCL for certain contaminants under certain conditions, and on specific contaminants, conditions, and allowable levels for which this approach would be appropriate. They also suggested that EPA encourage commenters to provide data in support of their comments. EPA does not support this recommendation because it believes that allowing these high risk wells to inject wastes that exceed MCLs in areas close to drinking water supplies does not meet the statutory requirement to protect public health by not endangering USDWs.

9.2 The Types and Number of Small Entities to Which the Proposed Rule Would Apply

The type and number of facilities that may be subject to the rule as estimated by EPA is presented in Table 1 (above). Four small entity representatives raised concerns about these estimates, given that the scope of the rule will be largely determined by state source water protection area delineations which have not yet been performed. Some Panel members also raised concerns about the methodology used to estimate the number of affected wells. The current methodology does not account for the fact that Class V wells tend to be located in populated areas, and may thus be more likely to occur in source water protection areas than if they were evenly distributed across a state. This could lead to an underestimate of the number of impacted wells. The Panel recommends that EPA ask for comment in the preamble to the proposed regulation on its methodology for estimating the number of impacted wells and, if possible, revise it to account for the likely overlap between areas where Class V wells are located and source water protection areas.

The Panel also discussed several issues raised by commenters on the exact scope of the proposed rule and agreed that further clarification was needed regarding which wells are being proposed for regulation. These issues are discussed in more detail below.

9.2.1 Stormwater Drainage Wells

Six commenters suggested that the current definition of Class V drainage wells proposed for regulation is unclear about the extent to which stormwater drainage wells are or are not included. The Panel recommends that EPA clarify that the proposed rule would not cover Class V drainage wells intended for stormwater management

that may occasionally receive minor amounts of waste due to unintentional small volume leaks, drips or spills and that cannot reasonably be separated from potential sources of contamination. Additionally, the Panel recommends that the preamble to the proposed rule be used to clarify the meaning of the phrase "cannot reasonably be separated" in this context.

9.2.2 Class V Wells at Car Washes

The Panel received comments from one small entity representative expressing concern over the language regarding car washes proposed for regulation in the current draft of the rule. The Panel recommends that the preamble to the rule be used to clarify that only wells at those car washes that are specifically set up to perform undercarriage or engine washing are considered to be Industrial Class V wells under the proposed rule. Wells at manual car washes using hand held hoses would not generally be covered.

9.2.3 Funeral Home Septic Systems

The Panel received comments from the National Funeral Directors Association (NFDA) that included a study which indicated that only three contaminants with potential human health concerns, formaldehyde, methanol, and phenol, are likely to be found in funeral home waste water in concentrations that exceed the MCL. The study concluded that these contaminants are generally adequately treated in septic systems such that concentrations exceeding the MCL do not reach groundwater. NFDA thus recommended that Class V septic systems operated by funeral homes be classified as "other industrial" wells in the proposed regulation, rather than as "high risk" industrial wells. EPA believes that it needs additional time to evaluate the data submitted by NFDA and consider whether or not to classify funeral home waste water wells under the "other industrial" category as suggested. EPA will solicit comment and additional data on this issue in the preamble to the proposed rule.

9.2.4 Definition of Motor Vehicle Wells

In response to Panel discussions, EPA agreed to clarify in the preamble to the proposed rule that if all motor vehicle waste fluids generated at a service facility are segregated so that none are injected, the facility's Class V well would not be prohibited and could be used to dispose of other waste streams such as storm water, ice melt, and carwash waste water. Examples of ways to segregate wastes include:

- Perform all vehicle maintenance in areas that do not drain to a Class V well. Use service bays connected to the Class V wells for ice melt or other non-motor vehicle waste discharges.

- Install a semi-permanent plug (a.k.a. plumber's plug) in the sump outlet leading to the injection well. Collect automotive waste and spills in the sump and periodically dispose of off-site. When necessary, remove the plug and use the well for non-automotive wastes only.

9.2.5. Statewide Coverage for States that Fail to Complete Source Water Assessments

Several commenters questioned the appropriateness of EPA's proposal to include within the scope of the rule all class V motor vehicle and industrial wells and large capacity cesspools within a state if the state fails to complete a SWAP by the extended statutory deadline of May 2003. These commenters believed this approach would unfairly impose a burden on some UIC operators who are not endangering community drinking water supplies because of the state's failure to comply with applicable deadlines. EPA believes this provision is necessary to protect USDWs because without a completed SWA, there will be no way of knowing which wells in the state pose the highest risk. EPA will request comment on this approach and whether there are situations where exceptions would be appropriate, in the preamble to the proposed rule.

9.3 Projected Reporting, Record Keeping, and Other Compliance Requirements of the Proposed Rule

The Panel received comments from five small entity representatives expressing concern that it will be difficult for owners and operators of Class V wells to assess if they are covered by this regulation because they will not know at the time of proposal and promulgation if they are located in a source water protection area. One commenter also noted that small businesses are often unaware of regulatory developments and expressed concern at the inflexible way in which EPA has enforced Class V UIC regulations in the past. This commenter suggested getting compliance information to the regulated community well in advance of enforcement actions. The Panel discussed this concern and EPA noted that the proposed rule includes language on how owners and operators can find out if they are located within a source water protection area. SBA supports the recommendation of some commenters that the rule include a requirement that UIC program authorities directly notify all known owners of covered Class V wells located in source water protection areas (based on state inventories) of their coverage under this rule once these areas are delineated.

Most commenters stated that compliance with this rule would be burdensome to small businesses. Four commenters were particularly concerned that clean-up and remediation requirements under RCRA or existing UIC regulations might be triggered by well closures under the proposed rule and questioned whether EPA has adequately factored these potentially high costs into its analysis of the rule's impacts. After discussing this issue within the Panel, EPA agreed that all costs incurred as a result of actions required under this rule, even if not based on rule requirements per se, should be included in its analysis of regulatory impacts, and EPA is currently revising its economic analysis to reflect such costs. The Panel also agreed that in areas where state and local authorities are already requiring closure of certain types of wells without this rule, the costs of closing such wells should not be included in the analysis for the rule.

9.4 Other Relevant Federal rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule

The proposed rule is closely connected with (1) the existing regulations governing UIC wells, (2) the Source Water Assessment and Protection Program under the SDWA, and (3) the solid and hazardous waste regulations under RCRA.

The Panel received comments from two small entity representatives suggesting that the proposed rule may be inconsistent with the approach currently being adopted by the underground storage tank (UST) program. Commenters suggested that the UST program uses a risk based approach which recognizes the potential for natural attenuation of contaminants in soil that may prevent them from endangering USDWs. Commenters were concerned that in cases where well closures resulting from the current proposal trigger soil remediation requirements, it may be difficult to distinguish soil contaminated by Class V wells from soil contaminated by USTs, which could lead to inconsistent remediation standards and conflicts with insurers.

In response, EPA noted that the UST program regulates underground or inground gasoline storage tanks to protect ground water from contamination by petroleum hydrocarbon leaks. While acknowledging that the majority of Class V injection wells affected by the proposed regulation are located at automotive service facilities, which may also have underground storage tanks, EPA believes there is no overlap, duplication, or conflict between the proposed Class V regulation and the existing UST regulations, because the proposed Class V regulation will not impose any additional regulations on any USTs at these facilities, nor directly require any remediation.

As previously noted, commenters were also concerned that the closure requirements in the current proposed rule would trigger soil remediation requirements under RCRA that may be very costly for small businesses. In response, EPA notes that the proposed Class V rule does not require soil sampling or site remediation when a motor vehicle waste disposal well, industrial well, or large-capacity cesspool is closed. However, EPA understands that sampling and remediation of contaminated soils or groundwater at these closed or closing wells may be required under state law, or as a matter of insurance, contract, local ordinance or other federal requirement. EPA believes that any such remediation should be, to the extent possible, carried out consistent with any ongoing remediation of UST contamination at affected facilities. In addition, any wastes generated during well closure or under alternative waste management scenarios after the wells are closed (e.g., spent cleaning solutions and absorbents) will have to be managed in accordance with applicable solid and hazardous waste regulations, including RCRA.

In summary, while EPA believes that the proposed Class V rule does not duplicate, overlap, or conflict with UST or RCRA requirements, EPA acknowledges that compliance with the proposed rule may trigger remediation and waste management requirements under other federal, state or local law.

9.5 Regulatory Alternatives

9.5.1 Time to Comply

The Panel noted the concerns expressed by four of the ten commenters that some owners and operators may not be able to comply with the proposed new requirements within 90 days, especially in cases where the most efficient compliance option is connection to a sanitary sewer or installation of treatment. The Panel thus recommends that the UIC Program Director be allowed to extend the deadline for up to one year in such situations. The Panel also recommends that the preamble to the rule be used to clarify that UIC Program Directors have additional flexibility to extend the deadline through compliance agreements with owners and operators of covered facilities.

9.5.2 Alternative Approaches for Motor Vehicle Wells

In response to comments raised by SERs concerning the burden of well closure on small entities, the Panel recommends that regulatory alternatives to the ban on automotive service wells in source water protection areas be considered. During the Panel's deliberations, EPA developed preliminary outlines of two alternative options that served as the basis for the Panel's subsequent discussions. They were:

1) Require owners and operators of Class V motor vehicle wells in SWPAs to meet MCLs at the point of injection. This option would require owners and operators of Class V automotive waste disposal wells to monitor their injectate and sludge and utilize BMPs and/or treatment, as appropriate, to meet MCLs. Although EPA is not currently planning to specify monitoring requirements for owners and operators of industrial wells in SWPAs that choose to meet MCLs, EPA believes that such requirements would be necessary for motor vehicle wells because it believes they pose a potentially greater risk. EPA has tentatively suggested that quarterly monitoring might be required if this option were adopted.

2) Retain the ban on Class V motor vehicle wells in SWPAs but allow owners and operators to apply for a waiver if they can demonstrate that they meet MCLs at the point of injection. This approach differs from the first option, in that motor vehicle wells in SWPAs would be prohibited unless the owner/operator applied for a waiver within a certain time-frame.

EPA indicated that it would be willing to co-propose its original option (requiring closure of all Class V motor vehicle wells in SWPAs) and the second of the two options presented above, and to request comment in the preamble on the first option. The Panel endorsed this approach. However, OMB and SBA also suggested that EPA consider expanding the flexibility available under the second option. Because this approach would require a site-specific determination by the UIC Program director before a waiver for a Class V motor vehicle well in a SWPA could be issued, OMB and SBA believe that the appropriate condition for such a waiver is that the well not endanger USDWs, rather than that it meet all MCLs at the point of injection. OMB and SBA suggested that the UIC Program Director should have the flexibility to identify site-specific situations where exceedence of an MCL for a particular

contaminant at the point of injection would not endanger USDWs and to include in the waiver any conditions necessary to ensure non-endangerment. OMB and SBA recommended that EPA request comment on this option in the preamble as well. EPA does not support this recommendation because it currently believes that allowing these high risk wells to inject wastes that exceed MCLs near drinking water supplies would endanger USDWs and would not provide adequate public health protection.

The Panel also recommended that the preamble presentation of the first option include a discussion of EPA's rationale for including additional monitoring requirements beyond those proposed for industrial wells and request comment on appropriate monitoring requirements under this option.