E

Exh 1

ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO	)	R01-26
REGULATION OF PETROLEUM	)	(Rulemaking – Land)
LEAKING UNDERGROUND STORAGE	)	
TANKS (35 ILL. ADM. CODE 742)	)	

TESTIMONY OF DOUG CLAY IN SUPPORT OF
THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL TO AMEND
35 ILL. ADM. CODE 732

My name is Doug Clay. I am the manager of the Leaking Underground Storage Tank Section within the Bureau of Land of the Illinois Environmental Protection Agency. I have been in my current position since September of 1994. This section is primarily responsible for reviewing the technical adequacy of plans, reports and associated budgets for the remediation of releases from underground storage tanks regulated under 35 Ill. Adm. Code, Parts 731 and 732.

Prior to assuming my current position, I was the manager of the Disposal Alternative Unit within the Permit Section of the Bureau of Land. I have also worked in the Permit Section in the Bureau of Water. I have been employed at the Illinois EPA since 1983 following the receipt of a B.S. degree in Civil Engineering from the University of Illinois. I have been a Registered Professional Engineer in Illinois since 1989. A copy of my resume is attached (Attachment 1).

Today I will be testifying in support of the proposed amendments to 35 Ill. Adm. Code, Part 732. These amendments are the result of : (1) clarifications necessitated by issues that have arisen since implementation of Part 732 in 1994 and subsequent amendments in 1997; and (2) a need to regulate Methyl tert-butyl ether (MTBE), as an indicator contaminant in gasoline, as a result of increased national health concerns.

The Agency has met with peer review groups on several occasions in an effort to reach consensus prior to submitting the proposed amendments to the Board. The peer groups include

representatives of the Illinois Petroleum Marketers Association, the Illinois Petroleum Counsel and the Illinois Environmental Regulatory Group. As a result I believe that the Agency and the groups have reached a consensus on the proposed amendments. The following testimony is in support of these amendments:

Electronic Reporting

Wording throughout these regulations has been added to allow the Agency the ability to require that plans, reports and forms be submitted in an electronic format as specified by the Agency. The Agency will provide written notice to owners/operators and their consultants prior to implementing this requirement. This change is being proposed in an effort to reduce the amount of paper the Agency must store and maintain in compliance with the State Records Act. The LUST Program files make up the largest portion of the file retention area for the Bureau of Land. Currently, the Agency is not in a position to require this information electronically. However, the proposed change will allow the Agency to implement electronic reporting once all the criteria are established by the State Records Commission and all approvals have been received, without initiating another rulemaking before the Board. Once electronic reporting is required, it will be imposed uniformly for all LUST projects.

Licensed Professional Geologist

Wording throughout these regulations has been added to allow a Licensed Professional Geologist to certify specific work, to the extent authorized by the Professional Geologist Licensing Act. This change would allow a Licensed Professional Geologist or a Licensed Professional Engineer to certify work in specific areas of the regulations pertaining to geology that had previously required a Licensed Professional Engineer's certification. For example, sections that have been changed to allow a Licensed Professional Engineer to certify work include, but are not

limited to, Site Evaluation (Section 732.307), Site Classification Completion Report (Section 732.309) and Classification by Exposure Pathway Exclusion (Section 732.312). The Professional Geologist Licensing Act (Public Act 89-0366) became effective July 1, 1996 and the subsequent regulations (Title 68: Professions and Occupations, Part 1252) became effective October 1, 1997. Although Title XVI of the Environmental Protection Act has not been modified to incorporated certifications by Licensed Professional Geologists, the Agency believes that the Board should make these changes, in light of the adoption of the Professional Geologist Licensing Act after Title XVI (adopted in 1993).

Section 732.300 and Section 732.409

Wording has been added to Section 732.300(b)(1) and Section 732.409(b) that requires that a form be submitted that identifies whether or not the tank owner/operator is also the owner of the site (i.e. property). If the tank owner/operator is different from the property owner, a certification must be signed by the property owner or agent that they accept the terms and conditions set forth within the Corrective Action Completion Report and that they agree to the recording of the No Further Remediation Letter on their property. This is our current procedure and this change would make clear to tank owners/operators their responsibility to get the property owner's concurrence on the remedial solution. This requirement is similar to a requirement in the Site Remediation Program.

Unless the tank owner/operator has assurances that the property owner agrees to the conditions under which the No Further Remediation Letter is being issued and agrees to the recording of the No Further Remediation Letter on their property, there is no reason for the Agency to issue the No Further Remediation Letter. If the No Further Remediation Letter, once issued, cannot be recorded, it is not "perfected" (see amendments to Section 732.703 below) and the

Agency would be compelled, in an effort to protect human health and to provide notice to the public, to take additional actions to void the originally issued No Further Remediation Letter. This would result in the Agency spending its limited resources voiding No Further Remediation Letters rather than reviewing remediation projects. Therefore, it is imperative to make sure that the tank owner/operator and the property owner (if different from the tank owner/operator) agree to the conditions of the No Further Remediation Letter as well as its recording on the chain of title, prior to the Agency issuing the No Further Remediation Letter.

Section 732.310

MTBE is being added as an indicator contaminant for gasoline. MTBE as an indicator contaminant will be required for all releases of gasoline reported to the Illinois Emergency Management Agency (IEMA) on or after the effective date of these amendments. If a site has not received a No Further Remediation Letter by the effective date of these amendments, the owner/operator may elect to address MTBE as an indicator contaminant at his/her site. In addition, even if the Agency has issued a No Further Remediation Letter for a site, the owner/operator may elect back into the LUST Program to address MTBE only if the release has caused off-site groundwater contamination exceeding the remediation objective established in the proposed 35 Ill. Adm. Code, Part 742 amendments currently before the Board.

MTBE is a volatile, organic chemical. Since the late 1970's, MTBE has been used as an octane enhancer in gasoline. Because it promotes more complete burning of gasoline, thereby reducing carbon monoxide and ozone levels, it is commonly used as a gasoline additive in localities with air quality concerns. In the Clean Air Act of 1990 ("CCA"), Congress mandated the use of reformulated gasoline ("RFG") in areas of the country with the worst ozone or smog problems. RFG must meet certain technical specifications set forth in the Act, including a specific oxygen

content. Ethanol and MTBE are the primary oxygenates used to meet the oxygen content requirement. MTBE is used in about 84% of RFG supplies. Prior to December 1997, 32 areas in a total of 18 states were participating in the RFG program. During this same period, RFG accounted for about 30% of gasoline nationwide.

In many states MTBE appears to be showing up in increasing levels in the environment. This includes detection of MTBE in both surface and groundwater sources of drinking water. While Illinois does not have monitoring data that indicates MTBE to be a problem in surface water sources of drinking water (rivers, streams and lakes), several communities that utilize groundwater have identified the presence of this contaminant in their water. Community water supplies ("CWS") in Illinois routinely sample for volatile organic chemicals as a result of Safe Drinking Water Act monitoring requirements. Under the Illinois CWS Laboratory Fee Program, analyses for MTBE have been reported as a part of standard laboratory methods since 1994.

The monitoring conducted at over 1200 CWS participating in the program (just over 1100 of these facilities are groundwater dependent) has resulted in twenty-six facilities with detections of MTBE. Four CWS have had to discontinue use of wells as a result of MTBE contamination:

- Oakdale Acres Subdivision (and two other small subdivisions served by private wells), located in Kankakee County, had to discontinue use of their wells and connect to a nearby CWS.
- The community of Island Lake had to take a well out of service as a result of elevated levels of MTBE.
- The community of East Alton had to take a well out of service as a result of elevated levels of MTBE.

- The community of Roanoke had to take a well out of service as a result of elevated levels of MTBE.

Nationally, in a limited number of instances, significant contamination of drinking water with MTBE has occurred due to leaks from underground and above ground petroleum storage tank systems and pipelines. Due to its small molecular size and solubility in water, MTBE moves rapidly into groundwater, faster than do other constituents of gasoline. MTBE, however, degrades much more slowly in groundwater than other components of gasoline. As such, it can travel farther and much more quickly than other components.

In Illinois, most of the concentrations of MTBE that have been found in drinking water sources are unlikely to cause adverse human health effects. However, the U.S. EPA is continuing to evaluate the available information and is doing additional research to seek more definitive estimates of potential risks to humans. One of the main concerns is determining what is the cancer causing potential of MTBE. Furthermore, studies have been conducted on the concentrations of MTBE in drinking water to determine the levels at which individuals can detect the odor or taste of the chemical. Since consumers can taste or smell as little as 20 to 40 parts per billion of MTBE, very low concentrations of the contaminant may be unacceptable.

Based on the occurrence of MTBE in public drinking water systems, the U.S. EPA has included it on a candidate list of chemicals that may require future regulation at the federal level. Sampling for MTBE has not been required for gasoline releases in Illinois. As a result, there is very little data on the presence of MTBE at sites that reported a gasoline release. However, since MTBE is used almost exclusively in gasoline, the highest potential source of groundwater contamination is from LUST sites.

On November 30, 1998, USEPA Administrator Carol Browner appointed a Blue Ribbon Panel of leading experts to investigate the concerns raised by the discovery of MTBE in drinking water supplies. The Blue Ribbon Panel concluded its investigation and presented its findings in July 1999. The report concluded that MTBE is more likely to contaminate groundwater and surface water than the other components of gasoline. Once MTBE is in groundwater, its physical and chemical properties make it very difficult to remediate the MTBE. As a result and as with other components of gasoline, it is much more effective to prevent the contaminant from reaching groundwater rather than treating the contaminants once in groundwater. The Executive Summary and Recommendations dated July 27, 1999 is included as an attachment to this testimony (see Attachment 2).

MTBE testimony has also been presented to the Board in proposed amendments to Tiered Approach to Corrective Action Objectives (35 Ill. Adm. Code 742) currently before the Board (R00-19). Please refer to the record of this rulemaking for additional MTBE information. In addition, USEPA, Office of Underground Storage Tanks has a web page devoted to MTBE. This page (www.epa.gov/swerust1/mtbe) has a number of reports and studies related to MTBE.

Section 732.402

Wording is added to clarify that if the Agency fails to take action to approve, reject or modify the site classification completion report within 120 days after the receipt of the completion report, that it is rejected by operation of law. This will make this section consistent with the rest of Part 732 and the Environmental Protection Act.

Section 732.404

In Subsection 732.404(b)(1)(A), wording was added to make it clear that following the completion of a High Priority Site corrective action plan, all groundwater contaminated as a result

of the LUST release must, except as allowed in Subsection 732.404(c), meet the remediation requirements referenced in Section 732.408, which are the remediation requirements of 35 Ill. Adm Code, Part 742.

Wording in Subsection 732.404(b)(1)(C) was changed to clarify that natural and man-made pathways must meet the appropriate remediation objectives developed in accordance with 35 Ill. Adm. Code, Part 742. There had been confusion as to what level of remediation was required for these pathways.

Subsections 732.404(b)(3) and (4) regarding compliance with remediation objectives when an engineered barrier was or was not relied upon were deleted. These Sections caused confusion and were redundant with other sections in Part 732 and Part 742 that address compliance with remediation objectives.

Subsection 732.404(c) was added to allow an owner or operator to receive a No Further Remediation Letter even if off-site contamination as a result of a LUST release has not been remediated because the owner or operator was unable to gain off-site access. The minimum criteria required by the Agency to demonstrate and document their efforts to gain access off-site are outlined in Section 732.411. The "best effort" criteria was based upon 52 Federal Register 45788 (see Attachment 3). Please note that receipt of a No Further Remediation Letter does not relieve the owner or operator of liability for off-site contamination.

Section 732.411

Section 732.411 has been added to identify the specific criteria required by the Agency to demonstrate and document "best efforts" by the owner or operator to gain access off-site for the purpose of investigating or remediating a LUST release. If the owner or operator can demonstrate to the Agency that they have met the criteria listed in 732.411, the Agency would issue a No

Further Remediation Letter. However, we would identify in the No Further Remediation Letter that off-site contamination due to the subject release was not remediated due to off-site access denial.

Section 732.503

Wording was relocated in Section 732.503(b) to clarify the exception to Agency notification requirements in the case of 20 day, 45 day or free product reports.

Section 732.703

Wording was added to Subsection 732.703(a) to clarify that a copy of any applicable institutional controls must be submitted with the No Further Remediation Letter to the Office of the Recorder or Registrar of Title for recording purposes. This will provide a complete record for review by a potential purchaser of the property.

Subsection 732.703(b) was changed to establish that a No Further Remediation Letter is effective between the Agency and the owner/operator upon issuance. However, a No Further Remediation Letter is "perfected" (see definition of perfected in 732.200) only upon proper recording. Failure to perfect the No Further Remediation Letter is a reason for the Agency to void such letter, pursuant to Subsection 732.704(a)(5). It is essential that No Further Remediation Letters be recorded on the property to make it clear to the public and potential or future purchasers of the property the conditions under which the No Further Remediation Letter was issued.

Subsection 732.703(c) has been added to address how No Further Remediation Letters issued for sites located in IDOT right of ways are perfected. These types of sites cannot be perfected through the recording of the No Further Remediation Letter because there is no title on which to record the letter. Therefore, IDOT must enter into a Memorandum of Agreement (MOA) with the Agency as outlined in this subsection.

Wording was added to Subsection 732.703(d) to clarify that the recording requirements do not apply to No Further Remediation Letters issued for federally owned land, because the No Further Remediation Letter cannot be recorded on the title. To perfect the No Further Remediation Letter, a Memorandum of Agreement (MOA) must be entered into by the Agency and one or more federal agencies.

Wording was added to Subsection 732.703(e) to clarify that land use restrictions may be revised only through the recording of a new No Further Remediation Letter issued by the Site Remediation Program pursuant to Title XVII of the Act, or, for a IDOT or a federally owned site, an amendment of the Memorandum of Agreement (MOA). The LUST Program pursuant to Title XVI of the Act or Part 732 will not issue the new No Further Remediation Letter. Once the LUST Program issues a No Further Remediation Letter, the owner or operator no longer has an option to modify their No Further Remediation Letter through the LUST Program.

Section 732.704

Wording was added to 732.704(a)(5), (7) and (8) to explain that the Agency may void a No Further Remediation Letter for failure to properly perfect the No Further Remediation Letter, failure to comply with the new requirement in Subsection 732.703(c) for an IDOT right of way, or failure to comply with the notice requirements when utilizing an ordinance as an institutional control. These actions must be taken to ensure that conditions under which the No Further Remediation Letter was issued are protective of human health and the environment.

Section 732.Appendix A

Appendix A was changed to reflect the inclusion of MTBE as an indicator contaminant for gasoline, consistent with the proposed modifications to Section 732.310.

THIS FILING IS SUBMITTED ON RECYCLED PAPER

DOUGLAS W. CLAY, P. E.

1021 North Grand Avenue East, P.O. Box 19276 • Springfield, Illinois 62794-9276 • 217/782-6762

EXPERIENCE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Manager, Leaking Underground Storage Tank Section
September 1994 - Present
Oversee and manage leaking underground storage tank related activities under the authority of the Illinois Environmental Protection Agency.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Manager, Bureau of Land, Permit Section, Hazardous Waste Branch
January 1994 - September 1994
Oversee and manage hazardous waste permit related activities in the Bureau of Land.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Manager, Bureau of Land, Permit Section, Disposal Alternatives Unit
June 1990 - January 1994
Oversee and manage treatment and other disposal alternative related permit activities in the Bureau of Land, Permit Section.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Environmental Protection Engineer IV, Bureau of Land, Permit Section, Solid Waste Unit
June 1988 - June 1990
Review permit applications for solid waste facilities.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Environmental Protection Engineer III, Bureau of Water, Permit Section, Municipal Unit
April 1985 - June 1988
Review permit applications for wastewater treatment facilities and sewer connections.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Environmental Protection Engineer II, Bureau of Water, Permit Section, Municipal Unit
July 1984 - April 1985
Review permit applications for wastewater treatment facilities and sewer connections.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Environmental Protection Engineer I, Bureau of Water, Permit Section, Municipal Unit
February 1983 - July 1984
Review permit applications for wastewater treatment facilities and sewer connections.

EDUCATION

UNIVERSITY OF ILLINOIS
Bachelors of Science, Civil Engineering, Graduated December 1982

PROFESSIONAL REGISTRATION

REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF ILLINOIS
1988 - Present

The Blue Ribbon Panel on Oxygenates in Gasoline

Executive Summary and Recommendations

Final, July 27, 1999

Introduction

The Federal Reformulated Gasoline Program (RFG) established in the Clean Air Act Amendments of 1990, and implemented in 1995, has provided substantial reductions in the emissions of a number of air pollutants from motor vehicles, most notably volatile organic compounds (precursors of ozone), carbon monoxide, and mobile-source air toxics (benzene, 1,3-butadiene, and others), in most cases resulting in emissions reductions that exceed those required by law. To address its unique air pollution challenges, California has adopted similar but more stringent requirements for California RFG.

The Clean Air Act requires that RFG contain 2% oxygen, by weight. Over 85% of RFG contains the oxygenate methyl tertiary butyl ether (MTBE) and approximately 8% contains ethanol - a domestic fuel-blending stock made from grain and potentially from recycled biomass waste. There is disagreement about the precise role of oxygenates in attaining the RFG air quality benefits although there is evidence from the existing program that increased use of oxygenates results in reduced carbon monoxide emissions, and it appears that additives contribute to reductions in aromatics in fuels and related air benefits. It is possible to formulate gasoline without oxygenates that can attain similar air toxics reductions, but less certain that, given current federal RFG requirements, all fuel blends created without oxygenates could maintain the benefits provided today by oxygenated RFG.

At the same time, the use of MTBE in the program has resulted in growing detections of MTBE in drinking water, with between 5% and 10% of drinking water supplies in high oxygenate use areas[1] showing at least detectable amounts of MTBE. The great majority of these detections to date have been well below levels of public health concern, with approximately one percent rising to levels above 20 ppb. Detections at lower levels have, however, raised consumer taste and odor concerns that have caused water suppliers to stop using some water supplies and to

---

[1]Areas using RFG (2% by weight oxygen) and/or Oxyfuel (2.7% by weight Oxygen)

incur costs of treatment and remediation. The contaminated wells include private wells that are less well protected than public drinking water supplies and not monitored for chemical contamination. There is also evidence of contamination of surface waters, particularly during summer boating seasons.

The major source of groundwater contamination appears to be releases from underground gasoline storage systems (UST). These systems have been upgraded over the last decade, likely resulting in reduced risk of leaks. However, approximately 20% of the storage systems have not yet been upgraded, and there continue to be reports of releases from some upgraded systems, due to inadequate design, installation, maintenance, and/or operation. In addition, many fuel storage systems (e.g. farms, small above-ground tanks) are not currently regulated by U.S. EPA. Beyond groundwater contamination from UST sources, the other major sources of water contamination appear to be small and large gasoline spills to ground and surface waters, and recreational water craft - particularly those with older motors - releasing unburned fuel to surface waters.

The Blue Ribbon Panel

In November, 1998, U.S. EPA Administrator Carol M. Browner appointed a Blue Ribbon Panel to investigate the air quality benefits and water quality concerns associated with oxygenates in gasoline, and to provide independent advice and recommendations on ways to maintain air quality while protecting water quality. The Panel, which met six times from January - June, 1999, heard presentations in Washington, the Northeast, and California about the benefits and concerns related to RFG and the oxygenates; gathered the best available information on the program and its effects; identified key data gaps; and evaluated a series of alternative recommendations based on their effects on:

- air quality
- water quality
- stability of fuel supply and cost

The Findings and Recommendations of the Blue Ribbon Panel

Findings Based on its review of the issues, the Panel made the following overall findings:

- The distribution, use, and combustion of gasoline poses risks to our environment and public health.

- RFG provides considerable air quality improvements and benefits for millions of US citizens.

- The use of MTBE has raised the issue of the effects of both MTBE alone and MTBE in gasoline. This panel was not constituted to perform an independent comprehensive health assessment and has chosen to rely on recent reports by a

number of state, national, and international health agencies. What seems clear, however, is that MTBE, due to its persistence and mobility in water, is more likely to contaminate ground and surface water than the other components of gasoline.

- MTBE has been found in a number of water supplies nationwide, primarily causing consumer odor and taste concerns that have led water suppliers to reduce use of those supplies. Incidents of MTBE in drinking water supplies at levels well above EPA and state guidelines and standards have occurred, but are rare. The Panel believes that the occurrence of MTBE in drinking water supplies can and should be substantially reduced.

- MTBE is currently an integral component of the U.S. gasoline supply both in terms of volume and octane. As such, changes in its use, with the attendant capital construction and infrastructure modifications, must be implemented with sufficient time, certainty, and flexibility to maintain the stability of both the complex U. S. fuel supply system and gasoline prices.

The following recommendations are intended to be implemented as *a single package* of actions designed to simultaneously maintain air quality benefits while enhancing water quality protection and assuring a stable fuel supply at reasonable cost. The majority of these recommendations could be implemented by federal and state environmental agencies without further legislative action, and we would urge their rapid implementation. We would, as well, urge all parties to work with Congress to implement those of our recommendations that require legislative action.

Recommendations to Enhance Water Protection

Based on its review of the existing federal, state and local programs to protect, treat, and remediate water supplies, the Blue Ribbon Panel makes the following recommendations to enhance, accelerate, and expand existing programs to improve protection of drinking water supplies from contamination.

Prevention

1. EPA, working with the states, should take the following actions to enhance significantly the Federal and State Underground Storage Tank programs:

   a. Accelerate enforcement of the replacement of existing tank systems to conform with the federally-required December 22, 1998 deadline for upgrade, including, at a minimum, moving to have all states prohibit fuel deliveries to non-upgraded tanks, and adding enforcement and compliance resources to ensure prompt enforcement action, especially in areas using

RFG and Wintertime Oxyfuel.

b. Evaluate the field performance of current system design requirements and technology and, based on that evaluation, improve system requirements to minimize leaks/releases, particularly in vulnerable areas (see recommendations on Wellhead Protection Program in 2. below)

c. Strengthen release detection requirements to enhance early detection, particularly in vulnerable areas, and to ensure rapid repair and remediation

d. Require monitoring and reporting of MTBE and other ethers in groundwater at all UST release sites

e. Encourage states to require that the proximity to drinking water supplies, and the potential to impact those supplies, be considered in land-use planning and permitting decisions for siting of new UST facilities and petroleum pipelines.

f. Implement and/or expand programs to train and license UST system installers and maintenance personnel.

g. Work with Congress to examine and, if needed, expand the universe of regulated tanks to include underground and aboveground fuel storage systems that are not currently regulated yet pose substantial risk to drinking water supplies.

2. EPA should work with its state and local water supply partners to enhance implementation of the Federal and State Safe Drinking Water Act programs to:

a. Accelerate, particularly in those areas where RFG or Oxygenated Fuel is used, the assessments of drinking water source protection areas required in Section 1453 of the 1996 Safe Drinking Water Act Amendments.

b. Coordinate the Source Water Assessment program in each state with federal and state Underground Storage Tank Programs using geographic information and other advanced data systems to determine the location of drinking water sources and to identify UST sites within source protection zones.

c. Accelerate currently-planned implementation of testing for and reporting of MTBE in public drinking water supplies to occur before 2001.

d. Increase ongoing federal, state, and local efforts in Wellhead Protection Areas including:
   - enhanced permitting, design, and system installation requirements for USTs and pipelines in these areas;
   - strengthened efforts to ensure that non-operating USTs are properly closed;
   - enhanced UST release prevention and detection
   - improved inventory management of fuels.

3. EPA should work with states and localities to enhance their efforts to protect lakes

and reservoirs that serve as drinking water supplies by restricting use of recreational water craft, particularly those with older motors.

4. EPA should work with other federal agencies, the states, and private sector partners to implement expanded programs to protect private well users, including, but not limited to:
   a. A nationwide assessment of the incidence of contamination of private wells by components of gasoline as well as by other common contaminants in shallow groundwater;
   b. Broad-based outreach and public education programs for owners and users of private wells on preventing, detecting, and treating contamination;
   c. Programs to encourage and facilitate regular water quality testing of private wells.

5. Implement, through public-private partnerships, expanded Public Education programs at the federal, state, and local levels on the proper handling and disposal of gasoline.

6. Develop and implement an integrated field research program into the groundwater behavior of gasoline and oxygenates, including:
   a. Identifying and initiating research at a population of UST release sites and nearby drinking water supplies including sites with MTBE, sites with ethanol, and sites using no oxygenate;
   b. Conducting broader, comparative studies of levels of MTBE, ethanol, benzene, and other gasoline compounds in drinking water supplies in areas using primarily MTBE, areas using primarily ethanol, and areas using no or lower levels of oxygenate.

Treatment and Remediation

7. EPA should work with Congress to expand resources available for the up-front funding of the treatment of drinking water supplies contaminated with MTBE and other gasoline components to ensure that affected supplies can be rapidly treated and returned to service, or that an alternative water supply can be provided. This could take a number of forms, including but not limited to:
   a. Enhancing the existing Federal Leaking Underground Storage Tank Trust Fund by fully appropriating the annual available amount in the Fund, ensuring that treatment of contaminated drinking water supplies can be funded, and streamlining the procedures for obtaining funding.
   b. Establishing another form of funding mechanism which ties the funding more directly to the source of contamination.
   c. Encouraging states to consider targeting State Revolving Funds (SRF) to help accelerate treatment and remediation in high priority areas.

8. Given the different behavior of MTBE in groundwater when compared to other components of gasoline, states in RFG and Oxyfuel areas should reexamine and enhance state and federal "triage" procedures for prioritizing remediation efforts at UST sites based on their proximity to drinking water supplies.

9. Accelerate laboratory and field research, and pilot projects, for the development and implementation of cost-effective water supply treatment and remediation technology, and harmonize these efforts with other public/private efforts underway.

Recommendations for Blending Fuel for Clean Air *and* Water

Based on its review of the current water protection programs, and the likely progress that can be made in tightening and strengthening those programs by implementing Recommendations 1 - 9 above, the Panel agreed broadly, although not unanimously, that even enhanced protection programs will not give adequate assurance that water supplies will be protected, and that changes need to be made to the RFG program to reduce the amount of MTBE being used, while ensuring that the air quality benefits of RFG, and fuel supply and price stability, are maintained.

Given the complexity of the national fuel system, the advantages and disadvantages of each of the fuel blending options the Panel considered (see Appendix A), and the need to maintain the air quality benefits of the current program, the Panel recommends an *integrated package* of actions by both Congress and EPA that should be *implemented as quickly as possible*. The key elements of that package, described in more detail below, are:

- Action agreed to broadly by the Panel to reduce the use of MTBE substantially (with some members supporting its complete phase out), and action by Congress to clarify federal and state authority to regulate and/or eliminate the use of gasoline additives that threaten drinking water supplies;

- Action by Congress to remove the current 2% oxygen requirement to ensure that adequate fuel supplies can be blended in a cost-effective manner while quickly reducing usage of MTBE; and

- Action by EPA to ensure that there is no loss of current air quality benefits.

The Oxygen Requirement

10. The current Clean Air Act requirement to require 2% oxygen, by weight, in RFG must be removed in order to provide flexibility to blend adequate fuel supplies in a cost-effective manner while quickly reducing usage of MTBE and maintaining

air quality benefits.

The panel recognizes that Congress, when adopting the oxygen requirement, sought to advance several national policy goals (energy security and diversity, agricultural policy, etc) that are beyond the scope of our expertise and deliberations.

The panel further recognizes that if Congress acts on the recommendation to remove the requirement, Congress will likely seek other legislative mechanisms to fulfill these other national policy interests.

Maintaining Air Benefits

11. Present toxic emission performance of RFG can be attributed, to some degree, to a combination of three primary factors: 1) mass emission performance requirements, 2) the use of oxygenates, and 3) a necessary compliance margin with a per gallon standard. In Cal RFG, caps on specific components of fuel is an additional factor to which toxics emission reductions can be attributed.

Outside of California, lifting the oxygen requirement as recommended above may lead to fuel reformulations that achieve the minimum performance standards required under the 1990 Act, rather than the larger air quality benefits currently observed. In addition, changes in the RFG program could have adverse consequences for conventional gasoline as well.

Within California, lifting the oxygen requirement will result in greater flexibility to maintain and enhance emission reductions, particularly as California pursues new formulation requirements for gasoline.

In order to ensure that there is no loss of current air quality benefits, EPA should seek appropriate mechanisms for both the RFG Phase II and Conventional Gasoline programs to define and maintain in RFG II the real world performance observed in RFG Phase I while preventing deterioration of the current air quality performance of conventional gasoline.[2]

There are several possible mechanisms to accomplish this. One obvious way is to

---

[2]The Panel is aware of the current proposal for further changes to the sulfur levels of gasoline and recognizes that implementation of any change resulting from the Panel's recommendations will, of necessity, need to be coordinated with implementation of these other changes. However, a majority of the panel considered the maintenance of current RFG air quality benefits as separate from any additional benefits that might accrue from the sulfur changes currently under consideration.

enhance the mass-based performance requirements currently used in the program. At the same time, the panel recognizes that the different exhaust components pose differential risks to public health due in large degree to their variable potency. The panel urges EPA to explore and implement mechanisms to achieve equivalent or improved public health results that focus on reducing those compounds that pose the greatest risk.

Reducing the Use of MTBE

12. The Panel agreed broadly that, in order to minimize current and future threats to drinking water, the use of MTBE should be reduced substantially. Several members believed that the use of MTBE should be phased out completely. The Panel recommends that Congress act quickly to clarify federal and state authority to regulate and/or eliminate the use of gasoline additives that pose a threat to drinking water supplies[3].

Initial efforts to reduce should begin immediately, with substantial reductions to begin as soon as Recommendation 10 above - the removal of the 2% oxygen

---

[3]Under §211 of the 1990 Clean Air Act, Congress provided EPA with authority to regulate fuel formulation to improve air quality. In addition to EPA's national authority, in §211(c)(4) Congress sought to balance the desire for maximum uniformity in our nation's fuel supply with the obligation to empower states to adopt measures necessary to meet national air quality standards. Under §211(c)(4), states may adopt regulations on the components of fuel, but must demonstrate that 1) their proposed regulations are needed to address a violation of the NAAQS and 2) it is not possible to achieve the desired outcome without such changes.

The panel recommends that Federal law be amended to clarify EPA and state authority to regulate and/or eliminate gasoline additives that threaten water supplies. It is expected that this would be done initially on a national level to maintain uniformity in the fuel supply. For further action by the states, the granting of such authority should be based upon a similar two part test:

1) states must demonstrate that their water resources are at risk from MTBE use, above and beyond the risk posed by other gasoline components at levels of MTBE use present at the time of the request.

2) states have taken necessary measures to restrict/eliminate the presence of gasoline in the water resource. To maximize the uniformity with which any changes are implemented and minimize impacts on cost and fuel supply, the panel recommends that EPA establish criteria for state waiver requests including but not limited to:

a. Water quality metrics necessary to demonstrate the risk to water resources and air quality metrics to ensure no loss of benefits from the federal RFG program.
b. Compliance with federal requirements to prevent leaking and spilling of gasoline.
c. Programs for remediation and response.
d. A consistent schedule for state demonstrations, EPA review, and any resulting regulation of the volume of gasoline components in order to minimize disruption to the fuel supply system.

[4]Although a rapid, substantial reduction will require removal of the oxygen requirement, EPA should, in order to enable initial reductions to occur as soon as possible, review administrative flexibility under existing law to allow refiners who desire to make reductions to begin doing so.

requirement - is implemented[4]. Accomplishing any such major change in the gasoline supply without disruptions to fuel supply and price will require adequate lead time - up to 4 years if the use of MTBE is eliminated, sooner in the case of a substantial reduction (e.g. returning to historical levels of MTBE use).

The Panel recommends, as well, that any reduction should be designed so as to not result in an increase in MTBE use in Conventional Gasoline areas.

13. The other ethers (e.g. ETBE, TAME, and DIPE) have been less widely used and less widely studied than MTBE. To the extent that they have been studied, they appear to have similar, but not identical, chemical and hydrogeologic characteristics. The Panel recommends accelerated study of the health effects and groundwater characteristics of these compounds before they are allowed to be placed in widespread use.

In addition, EPA and others should accelerate ongoing research efforts into the inhalation and ingestion health effects, air emission transformation byproducts, and environmental behavior of all oxygenates and other components likely to increase in the absence of MTBE. This should include research on ethanol, alkylates, and aromatics, as well as of gasoline compositions containing those components.

14. To ensure that any reduction is adequate to protect water supplies, the Panel recommends that EPA, in conjunction with USGS, the Departments of Agriculture and Energy, industry, and water suppliers, should move quickly to:

a. Conduct short-term modeling analyses and other research based on existing data to estimate current and likely future threats of contamination;
b. Establish routine systems to collect and publish, at least annually, all available monitoring data on:
   - use of MTBE, other ethers, and Ethanol,
   - levels of MTBE, Ethanol, and petroleum hydrocarbons found in ground, surface and drinking water,
   - trends in detections and levels of MTBE, Ethanol, and petroleum hydrocarbons in ground and drinking water;
c. Identify and begin to collect additional data necessary to adequately assist the current and potential future state of contamination.

---

[4]Although a rapid, substantial reduction will require removal of the oxygen requirement, EPA should, in order to enable initial reductions to occur as soon as possible, review administrative flexibility under existing law to allow refiners who desire to make reductions to begin doing so.

The Wintertime Oxyfuel Program

The Wintertime Oxyfuel Program continues to provide a means for some areas of the country to come into, or maintain, compliance with the Carbon Monoxide standard. Only a few metropolitan areas continue to use MTBE in this program. In most areas today, ethanol can and is meeting these wintertime needs for oxygen without raising volatility concerns given the season.

15. The Panel recommends that the Wintertime Oxyfuel program be continued (a) for as long as it provides a useful compliance and/or maintenance tool for the affected states and metropolitan areas, and (b) assuming that the clarification of state and federal authority described above is enacted to enable states, where necessary, to regulate and/or eliminate the use of gasoline additives that threaten drinking water supplies.

Recommendations for Evaluating and Learning From Experience

The introduction of reformulated gasoline has had substantial air quality benefits, but has at the same time raised significant issues about the questions that should be asked before widespread introduction of a new, broadly-used product. The unanticipated effects of RFG on groundwater highlight the importance of exploring the potential for adverse effects in all media (air, soil, and water), and on human and ecosystem health, before widespread introduction of any new, broadly-used, product.

16. In order to prevent future such incidents, and to evaluate of the effectiveness and the impacts of the RFG program, EPA should:
    d. Conduct a full, multi-media assessment (of effects on air, soil, and water) of any major new additive to gasoline prior to its introduction.
    e. Establish routine and statistically valid methods for assessing the actual composition of RFG and its air quality benefits, including the development, to the maximum extent possible, of field monitoring and emissions characterization techniques to assess "real world" effects of different blends on emissions
    f. Establish a routine process, perhaps as a part of the Annual Air Quality trends reporting process, for reporting on the air quality results from the RFG program.
    g. Build on existing public health surveillance systems to measure the broader impact (both beneficial and adverse) of changes in gasoline formulations on public health and the environment.

Appendix A

In reviewing the RFG program, the panel identified three main options (MTBE and other ethers, ethanol, and a combination of alkylates and aromatics) for blending to meet air quality requirements. They identified strength and weaknesses of each option:

MTBE/other ethers A cost-effective fuel blending component that provides high octane, carbon monoxide and exhaust VOCs emissions benefits, and appears to contribute to reduction of the use of aromatics with related toxics and other air quality benefits; has high solubility and low biodegradability in groundwater, leading to increased detections in drinking water, particularly in high MTBE use areas. Other ethers, such as ETBE, appear to have similar, but not identical, behavior in water, suggesting that more needs to be learned before widespread use

Ethanol An effective fuel-blending component, made from domestic grain and potentially from recycled biomass, that provides high octane, carbon monoxide emission benefits, and appears to contribute to reduction of the use of aromatics with related toxics and other air quality benefits; can be blended to maintain low fuel volatility; could raise possibility of increased ozone precursor emissions as a result of commingling in gas tanks if ethanol is not present in a majority of fuels; is produced currently primarily in Midwest, requiring enhancement of infrastructure to meet broader demand; because of high biodegradability, may retard biodegradation and increase movement of benzene and other hydrocarbons around leaking tanks.

Blends of Alkylates and Aromatics Effective fuel blending components made from crude oil; alkylates provide lower octane than oxygenates; increased use of aromatics will likely result in higher air toxics emissions than current RFG; would require enhancement of infrastructure to meet increased demand; have groundwater characteristics similar, but not identical, to other components of gasoline (i.e. low solubility and intermediate biodegradability)

Appendix B

Members of the Blue Ribbon Panel

Dan Greenbaum, Health Effects Institute, Chair
Mark Buehler, Metropolitan Water District, So. California
Robert Campbell, CEO, Sun Oil
Patricia Ellis, Hydrogeologist, Delaware Department of Natural Resources and Environmental Conservation
Linda Greer, Natural Resources Defense Council
Jason Grumet, NESCAUM
Anne Happel, Lawrence Livermore Nat. Lab
Carol Henry, American Petroleum Institute
Michael Kenny, California Air Resources Board
Robert Sawyer, University of California, Berkeley
Todd Sneller, Nebraska Ethanol Board
Debbie Starnes, Lyondell Chemical
Ron White, American Lung Assoc.

Federal representatives (Non-Voting):

Robert Perciasepe, Air and Radiation, US EPA
Roger Conway, US Dept. of Agriculture
Cynthia Dougherty, Drinking Water, U.S. EPA
William Farland, Risk Assessment, US EPA
Barry McNutt, US DOE
Margo Oge, Mobile Sources, US EPA
Samuel Ng, Underground Tanks, US EPA
Mary White, ATSDR
John Zogorski, USGS

Citation
52 FR 45788-01
1987 WL 146581 (F.R.)
(Cite as: 52 FR 45788)

Found Document

Rank 1 of 1

Database
FR

RULES and REGULATIONS

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 144, 264, 265, 270, and 271

[SWH; FRL 3211-6]

Hazardous Waste; Codification Rule for the 1984 RCRA Amendments

Tuesday, December 1, 1987

*45788 AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule..

SUMMARY: This rule is a companion to EPA's final rule of July 15, 1985, which codified requirements specified by the Hazardous and Solid Waste Amendments of 1984 (HSWA) that took effect immediately or shortly after enactment (see 50 FR 28702). The July 15 final rule amended EPA's hazardous waste regulations to incorporate the statutory language of HSWA into EPA's existing regulatory framework. This rule codifies further changes to the existing regulations which implement the HSWA provisions relating to corrective action and permitting for RCRA facilities. Today's rule also includes provisions to implement the statutory requirements pertaining to corrective action for releases beyond the facility boundary, and to corrective action for hazardous waste injection wells.

DATES: The following regulatory amendments to Title 40 of the Code of Federal Regulations become effective December 31, 1987--§§ 144.1(h), 144.31(g), 265.1(c)(2), 270.1(c) introductory text, (5) and (6), 270.4(a), 270.10(k), 270.14 (c) introductory text and (d), 270.41(a)(3), 270.60(b)(3) and the addition to Table 1 in 271.1(j).

The following regulatory amendments become effective immediately December 1, 1987--§§ 264.100(e) introductory text, (1) and (2), and 264.101(c).

ADDRESS: The docket for this rulemaking is available for public inspection in the sub-basement, U.S. EPA, 401 M Street SW., Washington, DC 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. The docket number

is F-87-CODF-FFFFF.

FOR FURTHER INFORMATION CONTACT:Sharon Frey, Closure/Financial Responsibility Section (WH-563), Office of Solid Waste, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; (202) 475-6725.

SUPPLEMENTARY INFORMATION:

Preamble Outline

I. Authority

These regulations are issued under authority of sections 2002, 3004, 3005, 3006, and 3015 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6912, 6924, 6925, 6926, and 6935.

II. Background

The preamble to the final codification rule promulgated on July 15, 1985 (50 FR 28702) provides substantial detail on the background and purpose of today's rule, which incorporates into the existing Subtitle C regulations an additional set of requirements from the 1984 Hazardous and Solid Waste Amendments (HSWA).

The preamble to the July 15, 1985 final rule should be read first to understand the context of this rule. Briefly, the July 15 rule codified, with very few changes, the statutory language of many of the new provisions of the HSWA to the existing Subtitle C regulations, with a preamble that provided EPA's legal interpretations of that language. Today's rule, by contrast, codifies changes to the Subtitle C regulations that are more than mere transpositions of those statutory provisions which took effect immediately or shortly after enactment. This rule and accompanying preamble deal with issues relating to corrective action and permit information requirements that are generally logical outgrowths of the 1984 amendments rather than requirements imposed directly by the statute. The proposal for today's rule was published for comment on March 28, 1986 (51 FR 10706). In addition to corrective action and permit requirements, the proposed rule also contained provisions addressing land disposal restrictions and minimum technology requirements under section 3004 of RCRA. Those latter provisions will be addressed in a separate final rule.

III. Section-by-Section Analysis

The following sections of this preamble include discussions of the major issues and explanations of EPA's rationale for promulgating the final rules.

A. Corrective Action Requirements

1. Permit Application Requirements

In the March 28, 1986 proposed rule, EPA proposed to amend § 270.14 by adding a new provision (paragraph d) requiring the provision of additional information in Part B applications pertaining to solid waste management units (SWMUs) at facilities seeking a RCRA permit. The proposed provision, as part of the codification of corrective action requirements under section 3004(u) of RCRA, would require owners and operators of facilities seeking permits to provide descriptive information on the SWMUs themselves and all available information pertaining to any release from the units. The proposal also gives EPA or an authorized state the authority to require the permit applicant to conduct sampling and analysis at the SWMUs to determine if more detailed analysis is necessary.

The Agency received many comments on the proposed requirement. Several commenters objected to the provision, arguing that it sets no real limitations on the amount of information which may be demanded by the permitted authority. In particular, these commenters contended that the proposed rule may compel permit applicants to conduct extensive sampling and analysis simply to determine whether a release has occurred.

The Agency, while sensitive to these concerns, is today promulgating the requirement as proposed. The Agency does not intend this rule to require extensive sampling and monitoring at every solid waste management unit at a RCR facility seeking a permit. However, EPA believes that sampling and analytical data are often necessary as part of its preliminary assessment of releases from SWMUs (the RCRA Facility Assessment or RFA) before a permit is issued, and that it should have a mechanism to require the owner/operator to provide those data. As described in the proposed rule, EPA will conduct an RFA [FN1] on each facility during *45789 the permitting process to determine whether a release from a SWMU has or is likely to have occurred, as well as to determine what subsequent investigations may be necessary to identify and characterize the release further. When EPA conducts an RFA, it will rely first on existing information about the facility and a site visit to make this determination. Sampling is generally required only in situations where there is insufficient evidence on which to make an initial release determination. This requirement is not anticipated to place an unreasonable new resource burden on owners/ operators. The actual extent of sampling will vary, however, depending on the amount and quality of existing information available.

FN1 The RFA was previously known as the Preliminary Assessment/Site Investigation (PA/SI), but has been changed to distinguish it from the analogou CERCLA process. Similiarly, the RFI (RCRA Facility Investigation) is analogous to a RI (Remedial Investigation under CERCLA. These procedures are described more fully in EPA's National Corrective Action Strategy, announced in the Federal Register of October 23, 1986 (51 FR 205).

The Agency also received a number of comments concerning certain descriptive information on SWMUs that the proposal required. One commenter objected that the proposed rule did not require a structural description of the solid waste management unit, arguing that this information is needed to determine the potential for releases of hazardous waste from the unit. Another suggested that EPA should require a hydrological study for solid waste management units as part of the permit application. A third commenter was concerned that the provision required information that may not be available for certain types of solid waste management units such as long-inoperative wood pallet or scrap metal storage areas.

As noted in the preamble to the proposed rule, the new requirements in § 270.14(d) are intended to assist the Agency in determining the existence or likelihood that there is or has been a release at a facility. Complete information on solid waste management units will enhance the Agency's ability t make these determinations; however, the Agency recognizes that for many solid waste management units, detailed information on waste characteristics and desig of the units may not be available. Accordingly, the final rule states that

while general information on solid waste management units (e.g., location, unit type, dimensions) is required for each unit, specification of all wastes that have been managed at the unit and information pertaining to releases from such units is required only to the extent that this information is available (with the exception of any additional data that may be required under § 270.14(d)(3)).

The Agency is generally retaining its proposed approach for the reasons stated above. EPA agrees, however, that structural descriptions of solid waste management units should be required to assist the Agency in determining the potential or likelihood that a release has occurred. The Agency recognizes that some SWMUs do not have defined engineered structures; in such cases this requirement would be satisfied by a general description. The final rule includes this requirement.

Another commenter expressed the concern that a conclusion from an RFA that no further investigation is necessary could be construed to shield owner/operators from any future responsibilities for responding to releases and implementing corrective action as necessary. The commenter further suggested that EPA should routinely require ground-water monitoring at certain types of solid waste management units, such as land treatment or disposal units, unless the facility could make a specific showing that no release has occurred or is likely to occur in the future.

The legislative history of section 3004(u) demonstrates that Congress intended to extend the requirements of section 3004(u) to releases that occur after permit issuance (see S. Rep. 98-284, 98th Cong. 1st Sess. 32 (1983)). Although the emphasis of the corrective action program is on addressing releases that are identified at the time of permit issuance, the Agency recognizes the need to detect and correct future releases from SWMU's. EPA has authority under section 3004(u) to require ground-water monitoring to detect future releases. However, the Agency currently believes it is not necessary to require routine ground-water monitoring at all SWMU's located on Subtitle C facilities. EPA is considering the need to monitor solid waste management facilities more broadly in the context of its review of the Subtitle D program for the regulation of solid waste. In the interim, the Agency intends to exercise its monitoring authority under section 3004(u) on a case-by-case basis, writing permit conditions to require monitoring (or modeling) for any media where it finds that a SWMU is likely to release hazardous constituents that pose a threat to human health and the environment. The Agency may consider factors such as the volume and concentration of the constituents, site characteristics, unit design or other factors in making this determination.

In cases where releases from a SWMU are not identified at the time of permit issuance, the owner/operator has a continuing responsibility to report and address such releases (ref. § 270.30(1)). In addition, permits for land disposal facilities will be reviewed five years after issuance, to determine

whether modifications to the permit, including any new or additional corrective action requirements should be added to the permit. At the time of permit reissuance, the Agency has the opportunity to reevaluate the potential for releases at the facility, and to address them in the context of the reissued permit.

Finally, the Agency received two comments requesting clarification of specific language in this provision. One commenter noted that paragraph (d)(3) should specify that sampling and analysis information be "supplied" to the permitting agency. Another commenter requested that the phrase "hazardous waste or constituents" in paragraph (d)(2) be clarified to read "hazardous waste or hazardous constituents." The final rule adopts these clarifications.

One commenter expressed the opinion that the permit application information requirements of § 270.14(d) should not apply to units in which certain wastes identified under RCRA section 3001(b)(3)(A)(i), including fossil fuel combustion wastes, are managed. The commenter argued that such wastes are exempt from coverage under § 3004(u), and therefore should not be required to comply with information requirements promulgated pursuant to section 3004(u). To support his contention, the commenter pointed out that section 3001(b)(3)(A) provides that these specified wastes shall be "subject only to regulation under other applicable provisions of Federal or state law in lieu of Subtitle C of RCRA until at least six months after the date of the submission of the applicable study required to be conducted under subsection * * * (n) * * * of section 8002" of RCRA. The commenter thus argued that since section 3004(u) is located in Subtitle C of RCRA, its requirements do not apply to fuel combustion wastes.

This comment raises a significant issue of statutory interpretation that applies not only to wastes from fossil fuel combustion, but also to three other categories of wastes excluded under section 3001. Section 3001(b)(3), the provision quoted above, also addresses wastes from the extraction, beneficiation and processing of ores and minerals ("mining wastes"), and cement kiln dust wastes. This provision is commonly called the "Bevill amendment." In addition, section 3001(b)(2) subjects drilling fluids, ***45790** produced waters, and other wastes associated with the production of crude oil or natural gas or geothermal energy ("oil and gas wastes") to a similar limitation.

EPA does not agree that these exclusions extend to corrective action for releases from solid waste management units under section 3004(u). EPA believes that Congress enacted these provisions in 1980 to prohibit EPA from regulating these wastes as "hazardous" while it studied the impacts of such regulation. When Congress enacted these exemptions in 1980, Subtitle C provided only for the regulation of hazardous waste. Hence, the reference to "this subtitle" indicated only an intent to exclude these special wastes from EPA's hazardous waste regulations.

Section 3004(u), however, does not fit in the 1980 statutory scheme. Although

t is located in Subtitle C, it provides for clean-up of releases of "hazardous onstituents" (not just hazardous wastes) from both hazardous waste and solid aste management units. Indeed, section 3004(u) is the only provision in ubtitle C that reaches beyond the universe of hazardous waste. Thus, the uestion of statutory interpretation for the Agency is whether the exemption, hich extends to regulation "under Subtitle C", should be read as covering the uthorities granted to EPA to correct releases of hazardous constituents at olid waste management units.

EPA does not believe that Congress intended the exemptions in section 3001, hich were clearly aimed at hazardous waste, to extend to corrective action for olid wastes under section 3004(u). Certainly nothing in the plain language of he legislative history of section 3004(u) suggests that Congress intended to reate any exemptions for any category of solid waste. Furthermore, the ommenter conceded that fossil fuel combustion wastes are "solid wastes" subject o corrective action regulation under Subtitle D and emergency clean-up orders nder Section 7003. (See the brief of petitioner Edison Electric Institute in nited Technologies Corporation v. EPA, D.C. Cir. No. 85-1654 consolidated ases.) It is more logical and consistent with Congressional goals to conclude hat these solid wastes are similarly subject to clean-up requirements under ection 3004(u).

An exemption from corrective action under section 3004(u) is also not necessary o achieve the goals of the original exemption in section 3001. The sponsors of he 1980 amendments were chiefly concerned with the lack of specific data howing that these solid wastes endangered human health and the environment, and he potential for disruptive economic impacts if these wastes were subject to egulation as hazardous wastes under Subtitle C. See, e.g., 126 Cong. Rec. 1101-1102 (daily ed. Feb. 19, 1980) (remarks of Representative Bevill); 125 ong. Rec. S6821 (daily ed. June 4, 1979) (remarks of Senator Huddleston). ection 3004(u), however, will not require any corrective action unless EPA btains data showing that specific solid waste management units are releasing azardous constituents in the manner that threatens human health and the nvironment. Furthermore, a decision to require clean-up under section 3004(u) ill not require compliance with the full range of Subtitle C regulations. For xample, the double liner retrofitting requirements in section 3005(j) would not pply to a solid waste management unit containing a Bevill waste or an oil and as waste. Corrective action will not have the same economic impact as full ubtitle C regulation. As indicated, Congress provided for corrective action or solid wastes under Subtitle D and/or section 7003; coverage under section 3004(u) simply provides a linkage between corrective action and the hazardous aste permitting process.

In summary, EPA has concluded that "Bevill wastes" and oil and gas wastes are ubject to the corrective action requirements of section 3004(u) when they are

found in solid waste management units at facilities that need permits to manage hazardous wastes.

2. Corrective Action Beyond the Facility Boundary

In the March 28, 1986 proposed rule, the Agency proposed to codify section 3004(v) of HSWA by adding §§ 264.100(e) and 264.101(c) to the current regulations. This proposal required owners/operators of hazardous waste treatment, storage, and disposal facilities to institute corrective action beyond the facility boundary where necessary to protect human health and the environment, unless the owner/operator is denied access to adjacent lands despite the owner/operator's best efforts. This requirement also applies to permit-by-rule facilities required to compy with § 264.101.

In the preamble to the proposed rule, the Agency solicited comment on how "best efforts" should be defined, and what kind of documentation should be required. Several commenters questioned the need for rigid or defined rules as to what constitutes "best efforts," arguing that the circumstances surrounding individual sites vary extensively, and therefore can not be adequately addressed in a generic rulemaking. Other commenters suggested that a certified letter sent by the owner or operator requesting access to conduct corrective action should suffice to demonstrate best efforts to obtain permission from the adjacent landowner. EPA agrees with those commenters who argued the need for a flexible, case-by-case approach. In determining what constitutes "best efforts," the Agency will consider a number of factors, including the necessity of the off-site investigation, the extent and significance of the release, the contacts made between property owners, and the reasonableness of the efforts. In any case, the Agency believes that efforts to seek permission should, at a minimum, be demonstrated through a certified letter (or equivalent demonstration) from the owner/operator.

In the proposed rule, the Agency also requested comments on what kinds of corrective measures should be required on-site if permission to extend corrective action measures beyond the facility boundary is denied. Specifically the Agency asked for comments on whether hydraulic gradient modifications or purchase of water rights should be required in these cases.

Several commenters cautioned that these alternatives may not be physically possible, legal, or effective in many cases. For example, gradient modifications may dewater neighbors' wells and streams, and water rights are not transferable in some states. In light of these considerations, the Agency agrees with those commenters who suggested that while these options may be appropriate at a particular site, they should not be an automatic requirement. Therefore, the agency will examine the feasibility and appropriateness of on-site measures on a case-by-case basis, considering site-specific hydrogeologic

conditions and other relevant factors, in situations where off-site access is denied. Today's final rule has added to §§ 264.100(e)(2) and 264.101(c) to clarify that owner/operators are not relieved of responsibilities to perform on-site corrective actions if off-site access is denied.

EPA disagrees with those commenters who argued that if permission from the adjacent landowner is denied--despite the owner/operator's best efforts-- the owner/operator should be relieved of all responsibility to clean up a release that has migrated beyond the facility boundary. The Agency believes that even if permission is denied, owners/operators may still not be relieved of their responsibility to undertake *45791 corrective measures to address releases that have migrated beyond the facility boundary. In such cases, owner/operators may be required, on a case-by-case basis, to implement certain corrective measures on-site to clean up releases beyond the facility boundary if such measures are necessary to protect human health and the environment, and if they are possible, legal, and effective.

The proposed rule also clarified that assurances of financial responsibility must be provided for corrective action beyond the facility boundary. This requirement has been promulgated as proposed. One commenter objected to this provision, arguing that there is no specific requirement under section 3004(v) of HSWA that owner/operators must provide such assurances. EPA disagrees with this commenter's interpretation of sections 3004(u) and 3004(v) of HSWA. The Agency believes that Congress intended the financial assurance requirements of sections 3004(a)(6) and 3004(u) to apply to all corrective actions that are necessary to address releases from solid waste management units at a facility, regardless of whether those releases have migrated beyond the facility boundary and thus require off-site actions. Rules proposed on October 24, 1986 (51 FR 37854) address in detail requirements for financial assurance for corrective action.

3. Corrective Action for Injection Wells

The March 28, 1986 rule proposed amendments to three sections of existing regulations for underground injection wells which inject hazardous waste: 40 CFR 144.1(h), 144.31(g), and 144.56. These proposed amendments were intended to define the requirements for such wells as related to the corrective action provisions of RCRA section 3004(u). Today's final rule makes final two of the three proposed amendments: §§ 144.1(h) and 144.31(g). The following discussion provides a general outline of the Agency's overall approach to permitting of hazardous waste injection wells as related to corrective action requirements under RCRA and the Safe Drinking Water Act (SDWA). It also explains today's new regulatory amendment (§ 270.60(b)(3)(ii)), and how and why this final rulemaking differs from the proposal.

i. SDWA and RCRA Permitting Scheme. A hazardous waste injection well must hav authorization to operate under both SDWA and RCRA. Authorization is obtained under SDWA through an Underground Injection Control (UIC) permit or an authorization by rule (see 40 CFR 144.21). RCRA authorization is obtained through interim status (40 CFR Part 265 Subpart R) or a permit-by-rule (40 CFR 270.60(b)). RCRA interim status facilities are considered to have a pending permit application, and must submit required information when it is called in b the regulatory authority. Neither RCRA nor SDWA authorization alone is sufficient to inject hazardous waste.

RCRA permits-by-rule issued after November 8, 1984 must address the corrective action requirements of RCRA section 3004(u), as codified in § 264.101 (see § 270.60(b)(3)). (The term "corrective action", in this context, is not the same as the term corrective action as used in the UIC program under 40 CFR 144.55 fc plugging man-made conduits). Sections 264.101 and 270.60(b) require that a RCR permit-by-rule issued after November 8, 1984, address corrective action for releases of hazardous waste or constituents from any solid waste management uni (SWMU) at the facility. Therefore, a RCRA permit- by-rule issued after this date must address any necessary corrective action not only for the well, but fo all SWMUs at the facility.

The timing of implementation of section 3004(u) corrective action requirements at facilities with injection wells will vary, depending on the nature of the facility and its permitting status. The major categories of facilities, and th corresponding timing of implementation of section 3004(u) requirements, are discussed briefly below.

First, many injection wells with RCRA interim status are located at interim status facilities which have another unit or units that are subject to RCRA permitting (e.g., hazardous waste storage tanks). For these facilities, as for all facilities which inject hazardous waste, EPA intends to review potential releases from the injection well as part of the UIC permitting process (under SDWA authorities, and, if necessary, RCRA section 3008(h)). However, implementation of substantive requirements of section 3004(u) for the well and all SWMUs at the facility will be addressed through the first RCRA permit issue to the other hazardous waste unit(s) at the facility. Once the RCRA permit for the other unit(s) has been issued, the injection well would automatically obtai its permit-by-rule by fulfilling the corrective action requirements of § 270.60(b), provided that the other requirements of § 270.60(b) have been met.

Second, some hazardous waste injection wells are located at facilities with no other units subject to RCRA permitting. In this case, EPA will implement corrective action requirements of section 3004(u) as they apply to SWMUs on the surface concurrently with the UIC permit process. These requirements will be imposed in a RCRA "rider permit" to the UIC permit which would be issued according to RCRA permitting procedures in conjunction with issuance of the UIC

permit. When the UIC and the RCRA "rider" permit have been issued, the well will have a RCRA permit-by-rule.

Third, some hazardous waste injection wells were issued UIC permits before November 8, 1984, and, therefore, are operating under a RCRA permit-by-rule rather than interim status. At the time the UIC permit is reissued, the facility must address the corrective action requirements for all SMWUs in order to renew the RCRA permit-by-rule. This will require a RCRA "rider" permit addressing section 3004(u) corrective action for all SWMUs for the wells to continue to handle hazardous waste.

Similarly, new injection wells or other wells which have never qualified for interim status and do not have a permit, will require a UIC permit and a RCRA "rider" permit addressing section 3004(u) corrective action for all SWMUs before the wells can handle hazardous waste.

ii. Section 144.1(h). Under previous requirements, issuance of a UIC permit essentially constituted issuance of a RCRA permit-by-rule, and, thus, provided the well's RCRA authorization. The final rule of July 15, 1985 (50 FR 28702) at § 270.60(b), however, now provides that the permit-by-rule requires 1) a UIC permit and 2) compliance with § 270.60(b) requirements (including corrective action). Thus, obtaining a UIC permit in and of itself is not sufficient to move a well from interim status to having a permit-by-rule. Therefore, § 144.1(h) of this final rule provides that hazardous waste injection wells now operating under RCRA interim status may retain RCRA interim status after issuance of a UIC permit. Until a RCRA permit, or a RCRA "rider" to a UIC permit, which addresses section 3004(u) corrective action is issued, the well must comply with applicable interim status requirements imposed by § 265.430, and Parts 144, 146, and 147 (and any requirement imposed in the UIC permit).

In addition to finalizing § 144.1(h), today's rule deletes § 265.1(c)(2) from existing regulations as a necessary conforming change. Section 265.1(c)(2) had provided that interim status requirements do not apply to a UIC well once its UIC permit has been issued. ***45792** This requirement is no longer appropriate since a facility must now do more than obtain a UIC permit to obtain a RCRA permit-by-rule.

Several comments were received on the § 144.1(h) regulatory amendment as proposed. One commenter expressed concern that a facility may be able to receive a UIC permit and maintain interim status in perpetuity, i.e., without any specified date for conducting corrective action. EPA disagrees with this comment. In the case of injection wells without surface units subject to RCRA permitting, EPA will require a RCRA permit-by-rule to address corrective action for surface SWMUs at the same time as the UIC permit is issued. This will consolidate any necessary corrective action and avoid duplicative permit proceedings. For wells with surface units operating under interim status, corrective action for all SWMUs will be addressed when the surface unit(s) is

permitted. The permitting of these units is subject to the statutory deadlines of HSWA, and therefore cannot be delayed significantly.

Furthermore, EPA believes that requiring injection wells in interim status to address corrective action for surface units at the time the UIC permit is issue would be counterproductive. One of the Agency's fundamental objectives in implementing the RCRA corrective action program is to assign highest priority t those facilities having the most serious environmental problems. If the Agency did not provide for the continuation of interim status after issuance of the UI permit, it would be required either to (a) delay issuance of the UIC permit until RCRA corrective action for surface units could be addressed, or (b) process the corrective action portion of the RCRA permit before other facilitie which may have more serious environmental problems. The Agency does not believe that either situation would effectively serve overall protection of human healt and the environment. In any case, however, if EPA identifies the need for corrective action at injection wells with interim status, it will address any problems through RCRA section 3008(h) or other enforcement authorities.

iii. Section 144.31(g). Today's rule finalizes § 144.31(g), which requires submission of available information regarding operating history and condition c the injection well, as well as any available information on known releases from the well or injection zone as part of the UIC permit process. The submission of this information will be used to evaluate the need for further investigations c corrective action for such releases. Site investigations will be required only to the extent necessary to follow up Agency concerns which arise during an evaluation of available information on the well.

One commenter expressed concern that, as proposed, § 144.31(g)(2) could requir submission of unnecessary information simply because it was "available," and suggested that "relevant" be added to qualify the statement. Another was concerned that site investigations would be required (under § 144.31(g)(3)) without evidence to support a concern about a release from a unit. Because evaluating historic releases can be difficult and the information that may be useful will follow no set pattern, EPA believes it is reasonable, and not an undue burden, for the applicant to submit whatever is available concerning corrective action. Obviously EPA only seeks information which relates to the problem, but the Agency believes that all pre-existing information should be analyzed by the regulating agency, rather than just the applicant. The intent of the amendment is to provide the Agency with the necessary information from owners/operators to support determinations as to whether more extensive investigations should be conducted to verify and fully characterize releases, and to compel corrective actions as necessary. Section 144.31(g)(2) has, therefore, been finalized unchanged from the proposal. New site investigations under § 144.31(g)(3), however, would only be required where necessary to determine whether a release has occurred. EPA believes the standard in the

proposed rule is appropriate and incorporates this standard in the final rule.

iv. Section 270.60(b)(3)(ii). Today's rule amends the permit-by-rule regulations of § 270.60 to require UIC facility owner/operators to submit certain information related to corrective action with their UIC applications. As discussed above, in a few cases, an injection well which requires a RCRA permit-by-rule may be the only unit at the facility which requires a RCRA permit. In such cases, information on SWMUs at the facility would not be obtained through a RCRA permit application process for a surface facility. The permit-by-rule must, therefore, be the vehicle for implementing corrective action at such facilities. Since information on SWMUs at the facility is necessary to develop any required corrective action conditions in a permit, EPA is persuaded that submission of this information (specified in today's rule at § 270.14(d)) should be a requirement for obtaining a permit-by-rule for hazardous waste injection wells. Submission of this information is a step which must occur prior to the issuance of the permit-by-rule. Only after corrective action schedules are written in a RCRA rider to the permit would the well have a permit-by-rule. The preamble to the March, 1986 proposal indicated that EPA was considering amending the permit-by-rule regulations (§ 270.60) to include such a requirement. Today's rule finalizes this requirement.

v. Section 144.56 (Deleted). Proposed § 144.56 has been deleted from this final rule. This section would have established, within the UIC regulations, corrective action requirements to implement section 3004(u) for the injection well through UIC permits. This proposed provision would have had the effect of implementing corrective action under RCRA section 3004(u) for the injection well under one permit, and for the surface units at the facility under a different permit at a different time. Upon further consideration, EPA has decided against adopting this approach. This decision is in keeping with the language of section 3004(u) which calls for corrective action to be addressed for the entire facility at the time the RCRA permit is issued. Section 3004(u) is a permit-related authority; EPA has concerns about the availability of this authority outside the context of a RCRA facility permit. Enforcement authorities under section 3008(h) and other authorities will be used as necessary to address corrective action at interim status facilities with injection wells prior to issuance of a RCRA permit.

vi. Comments on Applicability of Section 3004(u) to Hazardous Waste Injection Wells. Several commenters on the proposed rule suggested that section 3004(u) authority should not apply at all to facilities subject to permit-by-rule requirements. The Agency reaffirms its position, stated in the final codification rule issued on July 15, 1985 (50 FR 28712), that it sees no legal basis for departing from a literal reading of the statute, which appears to encompass any section 3005(c) permit within its mandate. Permits issued under section 3005(c) include those for any facility conducting or planning to conduct

treatment, storage, or disposal of hazardous wastes. None of these comments argue that Class I wells are outside the bounds of the activities described; they argue that, because the units are seeking permits under the UIC program in 40 CFR Part 144, they are not seeking a permit under section 3005(c) of RCRA. Hazardous waste injection wells *45793 seeking UIC permits are simultaneously seeking RCRA permits.

RCRA, as well as EPA regulations (40 CFR 270.1(c) (2) and (3)), contain exemptions to the section 3005(c) permitting requirements for specific types of facilities treating, storing, or disposing of hazardous waste. For example, section 3005(f) of RCRA specifically exempts facilities with coal mining wastes and reclamation permits from coverage by regulations promulgated under Subtitle C. Such a specific exclusion indicates that Congress consider which, if any, holders of other permits should be exempt from permitting under section 3005(c). Injection wells, however, are not specifically exempted by Congress, and, in fact, are specifically included as requiring a RCRA permit under 40 CFR 270.1(c)(1). The permit-by-rule was established to acknowledge that the standards already established under the Safe Drinking Water Act would constitute acceptable standards for RCRA section 3005(c).

One commenter suggested that EPA's proposed regulation regarding standards for managing recycled used oil (50 FR 49212, November 29, 1985) is inconsistent with the Agency position that corrective action applies to facilities subject to a RCRA permit-by-rule. However, the situation of recycled oil facilities differs significantly from that of UIC wells operating under a permit-by-rule. Section 3004(u) clearly states that corrective action must be addressed in permits issued under section 3005, which includes permits-by-rule for injection wells. The preamble to the proposed recycled used oil rule indicated that standards promulgated under section 3004(u) would not apply to certain recycled oil facilities. This is because recycled oil facilities are subject to permitting requirements under section 3014(d), rather than under section 3005(c). Therefore, the corrective action requirements of section 3004(u) do not apply. Further, the recycled oil proposal should not be considered a statement of final Agency policy; in a Federal Register notice at 51 FR 41903 (November 19, 1986), the Agency indicated that the used oil facility standards require further study before being finalized. The limited situation described in that proposal is not analogous to a facility with Class I underground injection wells which inject hazardous waste.

vii. Comments on Migration Within Injection Zone. Two commenters expressed concern that corrective action requirements for releases which migrate beyond the facility boundary, proposed in § 144.56(c), should not apply to wastes in the injection zone (a geological formation which may extend underground beyond the property boundary established on the surface). EPA has already stated in the preamble to the final codification rule issued on July 15, 1985 (see 50 FR

52 FR 45788-01
(Cite as: 52 FR 45788, *45793)

28712) that emplacement of liquids into an injection zone through a well does not constitute a release from a solid waste management unit, but rather is migration within a unit. Since RCRA corrective action requirements only apply to releases of hazardous waste or hazardous constituents from solid waste management units, the requirements do not apply to the wastes within an injection zone as described in the comments.

3. Permits

L. Permit Modifications

Section 270.41(a)(3) allows permits to be modified because of amended standards or regulations only if the permittee requests such modification. In the March 28, 1986 proposed rule, the Agency proposed to expand this provision in light of the recent statutory amendments to section 3005(c) of RCRA. This amendment allows EPA to initiate modifications to a permit without first receiving a request from the permittee, in cases where statutory changes or new or amended regulatory standards affect the basis of the permit.

Several commenters objected to the proposed rule on the grounds that it was unnecessary or would place permitted facilities in jeopardy of permit changes and would interfere with long-term planning. Some commenters suggested that EPA not initiate permit modifications except according to the schedule for the five-year or ten-year permit renewal. The Agency considered these comments but is promulgating this section as proposed. In order to minimize threats to human health and the environment, the Agency considers it important--and consistent with Congressional intent--to have the regulatory authority to modify RCRA permits when statutory changes or new regulations affect the standards on which the permits were based. Moreover, EPA does not believe that this requirement will unduly restrict planning efforts at RCRA facilities. Permit holders will be protected through standard rulemaking procedures against arbitrary or unnecessary changes, as well as by procedural protections built into the permit modification process. EPA does not intend to use this authority for minor procedural changes in regulatory requirements; rather, it is intended for significant amendments which may provide a substantial increase in protection of human health or the environment at a particular site.

The Agency also disagrees with those commenters who suggested that, to avoid potential abuse, EPA should codify specific conditions and criteria for reopening permits under this provision. The Agency believes that it would be unnecessarily time- and resource-consuming to issue specific guidance, criteria, or rules for its use. EPA will use this authority where it is necessary to protect human health and the environment, and does not believe that it should be limited to statutory provisions intended to have immediate effect, as one

commenter suggested.

In a related activity, EPA has recently completed regulatory negotiations on RCRA permit modification with representatives of industry, States, and public interest groups, and will be issuing a proposed rule based on the results of these negotiations. While EPA's proposal on permit modifications may substantially alter modification procedures, it will retain the principle that EPA or an authorized State may initiate modification procedures in cases where permit conditions are inconsistent with new statutory or regulatory requirements.

2. Permit as a Shield

The March 28, 1986 proposed rule sought to amend the "permit as a shield" provision (§ 270.4(a)) to clarify that permittees must comply with new requirements that are imposed by statute and with the land disposal regulations promulgated in 40 CFR Part 268.

Several comments on this proposed amendment addressed the question of how new requirements would actually be imposed on the permittee; that is, whether or not permits would have to be modified, and whether or not authorized States would have to have adopted these requirements, for the requirements to be enforceable. EPA emphasizes that these requirements are self-implementing and they are effective--and enforceable--at RCRA facilities regardless of whether c not the facility's permit has specific conditions that require compliance, or, for changes imposed by HSWA, an authorized State has formally incorporated thes requirements into its regulations (RCRA section 3006(g)). In fact, it is the responsibility of the owner/operator to comply with these requirements, even where there are contrary permit conditions (e.g., after certain specified dates, a land disposal facility is not ***45794** allowed to accept and dispose of a restricted waste, unless it has met the required treatment standard, regardless of the conditions stated in the facility's permit).

Because the statutory and regulatory requirements described in § 270.4(a) are effective regardless of permit conditions, EPA is not required to reopen existing permits to incorporate them and generally will not do so. However, permits issued after the effective date of a regulatory or statutory change would generally cite these requirements, so that their applicability would be clear both to the permittee and the public.

3. Permit Conditions as Necessary to Protect Human Health and the Environment

The March 28, 1986 proposed rule sought to amend the existing general permit application requirements under § 270.10 by adding a new paragraph (k) establishing the Administrator's authority to require information from permit

applicants concerning permit conditions necessary to protect human health and the environment. The Agency previously codified the HSWA provision which allowed EPA to establish permit conditions necessary to protect human health and the environment in § 270.32(b) (section 3005(c)).

A number of commenters argued that EPA's "omnibus" authority under section 3005(c) should be limited to special or unique circumstances different from those addressed in the regulations (such as the permitting of hazardous waste disposal/storage in underground mines), or to additional permit conditions which are "absolutely necessary" and intended to be incorporated in all similar facility permits. The Agency does not agree with these interpretations. The language of section 3005(c) as amended by HSWA gives the Agency broad authority to impose permit conditions necessary to protect human health and the environment, and does not contain the limitations suggested by the commenters. As noted in the preamble to the July 15, 1985 final rule, the Agency believes the Congressional intent underlying this provision includes authorization to impose permit conditions beyond those mandated by the regulations. Thus, in specific circumstances where regulatory requirements may be inadequate, the Agency believes that the use of 3005(c) authority is not limited either to unique cases or to "absolutely necessary" conditions affecting all similar facilities.

EPA agrees with those commenters who stated that the authority to require submittal of information to support permit conditions that are imposed under the authority of § 270.32(b) should be used sparingly, and not for random and unjustified "fishing expeditions," or for conditions unrelated to hazardous waste activities. The Agency intends to use this requirement only where necessary to protect human health and the environment, and only to address specific environmental circumstances that are not adequately covered in existing regulations. Therefore, § 270.10(k) is finalized as proposed.

4. Post-closure Permits

i. Applicability and Effective Date

Section 3005(i) of RCRA requires that all landfills, surface impoundments, waste piles and land treatment units which received hazardous wastes after July 26, 1982, comply with the same groundwater monitoring, unsaturated zone monitoring, and corrective action requirements that apply to new units. To implement this requirement, EPA proposed an amendment to § 270.1(c) that would require post-closure permits for all land disposal units receiving hazardous wastes after that date. This proposed amendment was intended to establish consistency between the Part 264 groundwater protection requirements and the requirement to obtain post-closure permits. Previously, post-closure permits

were required for land disposal units which closed after January 26, 1983, whil new section 3005(i) imposed Part 264 Subpart F requirements on any land disposa unit which received wastes after July 26, 1982.

The Agency received numerous comments on this proposal. Several commenters supported the proposal, whereas others questioned EPA's basic authority to required post-closure permits for RCRA facilities in general, and specifically for surface impoundments which closed by removal under interim status. The commenters cited the language of § 270.1(c), which requires post-closure permit for units which are subject to post-closure care requirements of § 264.117. Th commenters argued that impoundments which closed under interim status would not be required to receive post-closure permits, since they are not subject to § 264.117. EPD does not agree with the commenters who argue that EPA does not have authority to require RCRA permits for facilities during a "post-closure" period. See 47 FR 32291, 32292, 32336 (July 26, 1982). Furthermore, EPA has always intended that land disposal units that received waste after the effectiv date of Part 264 regulations must obtain permits and meet Part 264 requirements even if they close under interim status (see 47 FR 32336 (July 26, 1982)). In additional, new section 3005(i) makes compliance with certain Part 264 rules a statutory requirement. Section 3005(i) subjects interim status regulated units to those ground-water monitoring, unsaturated zone monitoring and corrective action requirements which are applicable to new permitted units. Therefore, since a permitted unit would be required to meet permit conditions providing fo post-closure care if closure by removal failed to meet the standard of § 264.228, interim status units must be treated in the same manner. EPA thus rejects the commenters' contention that post-closure permits cannot be required for units which closed under interim status. In today's final rule, the proposal to amend § 270.1(c) by eliminating the reference to § 264.117 has been adopted. This clarifies that units which close by removal under interim status rules are subject to post-closure requirements.

Several commenters argued that requiring post-closure permits for land disposal units that received wastes after July 26, 1982 increases the permit burden on the Agency and industry unnecessarily. Alternatives to the proposed post-closure permit requirement were suggested, including (1) amending Part 264 Subpart F so that it would apply only when a release is indicated by Part 265 monitoring, and (2) relying solely on the interim status closure and post-closure requirements of Part 265 to provide the requisite groundwater protectio measures. Section 3005(i) prohibits both alternatives, since it requires units to meet the Part 264 standards. Furthermore, the Agency is persuaded that the groundwater protection standards of Part 264 provide a more environmentally protective mechanism for addressing goundwater protection at closed facilities than would be obtained through interim status closure and post-closure requirements.

Several commenters argued that the proposed rule would create a "loophole" in the applicability of post-closure permits. The proposal, in tying applicability of post-closure permits to the receipt of waste after July 26, 1982, would not have required post-closure permits for units which stopped receiving wastes prior to that date, but which did not complete closure until after January 26, 1983. Thus, some units which previously were subject to the post-closure permits requirement (i.e., that closed after 1/26/83), would be released from such requirements under the proposal. EPA agrees that such a loophole is not desirable. Therefore, ***45795** today's final rule differs from the proposed revision to § 270.1(c) by requiring post-closure permits for any landfill, surface impoundment, waste pile, or land treatment unit which received waste after July 26, 1982, or which closed after January 26, 1983. The term "closure" in this context has been clarified to mean certification of closure according to § 265.115. An exception to this post-closure permit requirement would be in the case of units which close by removal or decontamination according to the requirements of Part 264 (i.e., §§ 264.228, 264.258, 264.280(e): See following discussion).

ii. Closure by Removal. The preamble to the proposed rule also discussed how the proposal will affect regulated units which close by removal according to Part 265. The preamble acknowledged that permitted surface impoundments, waste piles, and land-treatment units need not conduct post-closure care under a post-closure permit if they satisfy the requirements for closure by removal or decontamination in §§ 264.228 (for surface impoundments), 264.258 (for waste piles), or 264.280(e) (for land treatment units). However, the interim status units that closed by removal under Part 265 standards as written prior to the recent promulgation of conforming changes to the Part 265 closure standards, may not meet Part 264 standards for closure by removal. Such units would retain post-closure responsibilities, including the requirement to obtain post- closure permits. The recent conforming changes rule made the interim status standards for closure by removal for surface impoundments equivalent to the permitting standards for surface impoundment closures. See 52 FR 8704 (March 19, 1987).

The preamble to the March 28, 1986 proposal requested comment on whether all facilities that closed by removal under Part 265 be considered subject to post-closure permitting requirements, or whether EPA should allow facilities to demonstrate that they complied with Part 264 closure standards, and thus do not require post-closure permits. A number of commenters supported the idea of a equivalency demonstration which would serve to establish whether a closed unit met the Part 264 standards, and which would be implemented through a process which EPA would define. One commenter suggested that EPA or the state should base the determination of equivalency on a review of the closure plan and its implementation. Another commenter supported the idea of using the post-closure permit application process to gather necessary information on which to base a

determination of equivalency. Several commenters opposed an alternative to the post-closure permitting process for making such determinations, since they believed it would involve less public participation, lacked a corrective action "trigger," and would not assure that Part 264 standards were met.

After considering these comments, EPA has decided to use the Part B permit application process as the primary mechanism for collecting the information to allow a determination to be made as to whether a regulated unit which closed by removal or decontamination did so in compliance with the corresponding requirements of Part 264. The Part B application process is a well-established system for reviewing the types of groundwater, soil and other sampling and analytical data that will typically be required in determining the "equivalency of interim status closure. However, the Agency has decided that an owner-operator should be allowed to demonstrate that a unit has been closed in accordance with the Part 264 closure by removal or decontamination standards, without having to submit a full Part B application for a post- closure permit. Therefore, the Agency is establishing a mechanism in today's rulemaking to allo such "equivalency demonstrations" to be made outside the Part B permit process.

As provided by § 270.1(c)(5)(ii) (promulgated today) an owner/operator may request the Regional Administrator to determine whether a post-cloture permit i required for a surface impoundment, waste pile or land treatment unit that closed according to Part 265 closure standards. These requests may be submitte at any time at the discretion of the owner/operator, including when EPA calls i the Part B post-closure permit application. If the owner or operator has not previously submitted a Part B permit application, he must provide sufficient information, including data on contaminant levels in soil and ground water, to demonstrate that the applicable Part 264 standards for closure by removal or decontamination have been met.

The Agency will review the information to determine whether the "equivalency" of the closure has been successfully demonstrated. If EPA determines that the interm status closure has met the appropriate Part 264 closure standard, a full Part B permit application will not be required to be submitted, nor will a post-closure permit be issued. The Agency will give public notice of such determinations and provide the opportunity for public comment using a procedure that parallels the closure plan approval procedures outlined in § 265.112(d)(4) If EPA determines that the closure does not meet the Part 264 standards, the owner/operator will be required to submit a Part B permit application containin all the applicable information in accordance with Part 270, and EPA will issue post-closure permit. EPA anticipates that the number of "non-equivalent" interim status closures will decrease as the new conforming changes rule takes effect. This determination process will apply primarily to closures completed under the previous interim status rules.

It should be understood that the process of demonstrating equivalency of

closure will not affect the due date of a Part B application once it has been requested. If a petition is submitted after a Part B has been requested, it may be difficult for the Agency, given the time required to review the data and process the petition, to make a determination well in advance of the Part B due date. This could create difficulties, especially when a petition is rejected, allowing little time for the owner/operator to prepare a Part B by the specified due date. The Agency therefore urges owners/operators who intend to submit equivalency demonstrations to do so before the facility's Part B is requested.

One commenter on the proposed rule raised concerns regarding facilities which are able to successfully demonstrate "equivalency" for a closed unit, and which thereby may not be required to obtain a post-closure permit for the facility. Specifically, the commenter noted that the absence of a permitting requirement would relieve the owner/operator of the responsibility for complying with section 3004(u) corrective requirements. The commenter further argued that, although such facilities will be subject to section 3008(h) interim status corrective action order authority, this enforcement authority is an "inadequate substitute" for section 3004(u) is obtaining corrective action.

EPA does not agree that the section 3008(h) authority is inadequate as a means of addressing necessary corrective action at facilities with units that have successfully demonstrated equivalent closure by removal. Section 3008(h) is substantially identical to section 3004(u) in terms of the type and scope of cleanup actions which can be required of facility owner/operators. Although procedurally the two authorities differ, and the enforcement authority is discretionary in the sense *45796 that it is not automatically triggered upon issuance of a permit, it is the Agency's view that section 3008(h) can and will be used effectively to address necessary corrective action requirements at facilities which will not require post-closure permits due to "equivalent" closure.

IV. State Authority

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 7003, and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to HSWA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in a State where the State was authorized to issue permits. When

new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA requirements are applied by EPA in authorized States in the interim.

Today's rule is promulgated pursuant to RCRA sections 3004(u), 3004(v) and 3005(i). These provisions were added by HSWA. Therefore, the Agency is adding the requirement to Table 1 in § 271.1(j) which identifies the Federal program requirements that are promulgated pursuant to HSWA and that take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions identified in Table 1, as discussed in the following section of this preamble.

B. Effect on State Authorizations

As noted above, EPA will implement today's rule in authorized States until they modify their programs to adopt these rules and the modification is approved by EPA. Because the rule is promulgated pursuant to HSWA, a State submitting a program modification may apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The procedures and schedule for State program modifications for either interim or final authorization are described in 40 CFR 271.21. It should be noted that all HSWA interim authorizations will expire January 1, 1993 (see § 271.24(c)).

40 CFR 271.21(e)(2) requires that States that have final authorization must modify their programs to reflect Federal program changes, and must subsequently submit the modifications to EPA for approval. The deadline for State program modifications for this rule is July 1, 1989 (or July 1, 1990 if a state statutory change is needed). These deadlines can be extended in certain cases (40 CFR 271.21(e)(3)). Once EPA approves the modification, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State regulations have not been assessed against the Federal regulations beings promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these

requirements in lieu of EPA until the State program modification is approved. Of course, States with existing standards may continue to administer and enforce their standards as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts. In many cases EPA will be able to defer to the States in their efforts to implement their programs, rather than take separate actions under Federal authority.

States that submit their official applications for final authorization less than 12 months after the effective date of these standards are not required to include standards equivalent to these standards in their application. However, the State must modify its program by the deadline set forth in § 271.21(e). States that submit official applications for final authorization 12 months after the effective date of these standards must include standards equivalent to these standards in their application. The process and schedule for final State authorization applications is described in 40 CFR 271.3.

It should be noted that authorized States are only required to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than the existing Federal standards. However, none of the standards promulgated today are considered to be less stringent than or to reduce the scope of the existing Federal requirements.

V. Effective Dates

EPA believes it has a sound basis for suspending the statutory six-month effective date (RCRA section 3010(b)) for certain provisions promulgated today. HSWA amended section 3010(b) to provide that EPA may shorten or provide for an immediate effective date where (1) the regulated community does not need six months to come into compliance, (2) the regulation responds to an emergency situation, or (3) there is other good cause. Sections 144.1(h) and 265.1(c)(2) (which is deleted by this rule) are not new requirements but merely clarify that a UIC well may obtain a UIC permit under Part 144 but still maintain RCRA interim status. The sections outlining information necessary for corrective action permit decisions (§ 144.31(g), 270.14 (c) and (d), and 270.60(b)(3)(ii)) are necessary to process what is already a statutory requirement. In most cases the authority to request the information already exists. For other provisions of today's rulemaking relating to corrective action and permitting requirements, EPA believes that the regulated community does not need six months to come into compliance with these regulations. Therefore, §§ 265.1(c)(2), 270.1(c), 270.4(a) 270.10(k), 270.14 (c) and (d), 270.41(a)(3), 270.60(b)(3)(ii) and 271.1(j) will become effective in thirty days, as required by the Administrative Procedures Act, 5 U.S.C. 553(d).

In addition regulations pertaining to corrective action beyond the facility

boundary (§§ 264.100(e) and 264.101(c)), implementing section 3004(v) of RCRA, will become effective on the date of promulgation. Section 3004(v) requires th Agency to amend its regulatory standards to address corrective actions beyond the facility boundary and states that these amendments "shall take effect immediately upon promulgation, notwithstanding section 3010(b) * * *."

*45797 VI. Regulatory Analyses

A. Regulatory Impact Analysis

Executive Order No. 12291 requires each Federal agency to determine if a regulation is a "major" rule as defined by the order and "to the extent permitted by law," to prepare and consider a Regulatory Impact Analysis (RIA) i connection with every major rule.

This rule establishes several information requirements, and merely codifies corrective action requirements for releases migrating beyond the property boundary. It does not however, establish the specific levels that facilities must meet in taking corrective actions. The Agency intends to specify these levels in a proposed rule being developed under section 3004(u) of RCRA, along with a complete assessment of the costs, impacts and benefits.

The regulatory impact analysis for today's rule, therefore, only addressed the costs associated with new information requirements. These information requirements alone do not impose costs that would make it a major rulemaking as defined by Executive Order No. 12291. This regulation is thus not considered t be a major rule.

A complete assessment of the impacts of the section 3004 (u) and (v) correctiv action requirements which EPA anticipates to be major, will be addressed in the RIA that is now being prepared as part of the section 3004(u) regulations. The RIA will accompany the section 3004(u) rule when it is proposed.

This final rule was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order No. 12291.

B. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., at the time an agency publishes any proposed or final rule in the Federal Register, it must prepare a Regulatory Flexibility Analysis which describes the impact of the rul on small businesses and organizations, unless the Agency's Administrator certifies that the rule will not have a significant economic impact on a substantial number of small entities.

The Agency has examined the final rule's potential impacts on small business and has concluded that this regulation will not have a signficant impact on a

substantial number of small entities. In a cost analysis accompanying the March 28, 1986 proposal, EPA compared potential costs of compliance to its 1982 implementation criteria for a Regulatory Flexibility Analysis. Under the most stringent regulatory scenario, neither costs nor impacts of the proposed rule met the criteria for significant impact. Therefore, this final rule does not require a Regulatory Flexibility Analysis.

Accordingly, I hereby certify that this proposed rule will not have a significant impact on a substantial number of small entities.

C. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., EPA must estimate the paperwork burden created by any information collection request contained in the proposed or final rule.

The information collection requirements in this final rule have been approved by OMB in accordance with the Paperwork Reduction Act of 1980 and were assigned OMB Control Nos. 2050-0009, 2050-0002, and 2050-0007.

List of Subjects

40 CFR Part 144

Administrative practice and procedure, Confidential business information, Hazardous waste, Indian lands, Reporting and record-keeping requirements, Surety bonds, Water supply.

40 CFR Part 264

Hazardous waste, Insurance, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Water supply.

40 CFR Part 265

Hazardous waste, Insurance, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Water supply.

40 CFR Part 270

Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements, Water pollution control, Water supply.

52 FR 45788-01
(Cite as: 52 FR 45788, *45797)

49 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.
Dated: November 16, 1987.

Lee M. Thomas,

Administrator.

Therefore, Title 40 of the Code of Federal Regulations is amended as follows:

PART 144--REQUIREMENTS FOR THE UNDERGROUND INJECTION CONTROL PROGRAM

1. The authority citation for Part 144 is revised to read as follows:

Authority: 42 U.S.C. 300(f) et seq.; and 42 U.S.C. 6901 et seq.

2. In § 144.1, paragraph (h) is added to read as follows:

§ 144.1 Purpose and scope of Part 144.

* * * * *

(h) Interim Status Under RCRA for Class I Hazardous Waste Injection Wells. The minimum national standards which define acceptable injection of hazardous waste during the period of interim status under RCRA are set out in the applicable provisions of this Part, Parts 146 and 147, and § 265.430 of this chapter. The issuance of a UIC permit does not automatically terminate RCRA interim status. A Class I well's interim status does, however, automatically terminate upon issuance to that well of a RCRA permit, or upon the well's receiving a RCRA permit-by-rule under § 270.60(b) of this chapter. Thus, until a Class I well injecting hazardous waste receives a RCRA permit or RCRA permit-by-rule, the well's interim status requirements are the applicable requirements imposed pursuant to this Part and Parts 146, 147, and 265 of this chapter, including an requirements imposed in the UIC permit.

3. In § 144.31, paragraph (g) is revised to read as follows:

§ 144.31 Application for a permit; authorization by permit.

* * * * *

(g) Information Requirements for Class I Hazardous Waste Injection Wells
ermits. (1) The following information is required for each active Class I
azardous waste injection well at a facility seeking a UIC permit:
(i) Dates well was operated.
(ii) Specification of all wastes which have been injected in the well, if
vailable.
(2) The owner or operator of any facility containing one or more active
azardous waste injection wells must submit all available information pertaining
o any release of hazardous waste or constituents from any active hazardous
aste injection well at the facility.
*45798 (3) The owner or operator of any facility containing one or more active
lass I hazardous waste injection wells must conduct such preliminary site
nvestigations as are necessary to determine whether a release is occurring, has
ccurred, or is likely to have occurred.

ART 264--STANDARDS FOR THE OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT,
TORAGE, AND DISPOSAL FACILITIES

4. The authority citation for Part 264 is revised to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

5. Section 264.100 is amended by redesignating paragraph (e) (1) and (2) as
e) (3) and (4), by adding new paragraphs (e) (1) and (2), and by revising the
ntroductory text of paragraph (e) to read as follows:

264.100 Corrective action program.

* * * *
(e) In addition to the other requirements of this section, the owner or
perator must conduct a corrective action program to remove or treat in place
ny hazardous constituents under § 264.93 that exceed concentration limits under
264.94 in groundwater:
(1) Between the compliance point under § 264.95 and the downgradient property
oundary; and
(2) Beyond the facility boundary, where necessary to protect human health and
he environment, unless the owner or operator demonstrates to the satisfaction
f the Regional Administrator that, despite the owner's or operator's best
fforts, the owner or operator was unable to obtain the necessary permission to
ndertake such action. The owner/operator is not relieved of all responsibility
o clean up a release that has migrated beyond the facility boundary where off-
ite access is denied. On-site measures to address such releases will be

determined on a case-by-case basis.

* * * * *

6. In § 264.101, paragraph (c) is added to read as follows:

§ 264.101 Corrective action for solid waste management units.

* * * * *

(c) The owner or operator must implement corrective actions beyond the facilit property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the Regional Administrator that, despite the owner's or operator's best efforts, the owner c operator was unable to obtain the necessary permission to undertake such actions. The owner/operator is not relieved of all responsibility to clean up release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case by-case basis. Assurances of financial responsibility for such corrective action must be provided.

PART 265--INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES

7. The authority citation for Part 265 is revised to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, and 6935.

§ 265.1 [Amended].

8. In § 265.1 paragraph (c)(2) is removed and reserved.

PART 270--EPA-ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

9. The authority citation for Part 270 is revised to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

10. In § 270.1, the introductory text of paragraph (c) is revised and paragraphs (c)(5) and (c)(6) are added to read as follows:

§ 270.1 Purpose and scope of these regulations.

* * * * *

(c) Scope of the RCRA Permit Requirement. RCRA requires a permit for the

'treatment," "storage," and "disposal" of any "hazardous waste" as identified or listed in 40 CFR Part 261. The terms "treatment," "storage," "disposal," and 'hazardous waste" are defined in § 270.2. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to § 265.115) after January 26, 1983, must have post-closure permits, unless they demonstrate closure by removal as provided under § 270.1(c) (5) and (6). If a post-closure permit is required, the permit must address applicable Part 264 Groundwater Monitoring, Unsaturated Zone Monitoring, Corrective Action, and Post-closure Care Requirements of this chapter.

* * * * *

(5) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under Part 265 standards must obtain a post-closure permit unless they can demonstrate to the Regional Administrator that the closure met the standards for closure by removal or decontamination in § 264.228, § 264.280(e), or § 264.258, respectively. The demonstration may be made in the following ways:

(i) If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that section 264 closure by removal standards were met. If the Regional Administrator believes that § 264 standards were met, he/she will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in paragraph (c)(6) of this section.

(ii) If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the Regional Administrator for a determination that a post-closure permit is not required because the closure met the applicable Part 264 closure standards.

(A) The petition must include data demonstrating that closure by removal or decontamination standards were met, or it must demonstrate that the unit closed under State requirements that met or exceeded the applicable 264 closure-by-removal standard.

(B) The Regional Administrator shall approve or deny the petition according to the procedures outlined in paragraph (c)(6) of this section.

(6) Procedures for closure equivalency determination. (i) If a facility owner/operator seeks an equivalency demonstration under § 270.1(c)(5), the Regional Administrator will provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within 30 days from the date of the notice. The Regional Administrator will also, in response to a request or at his/her own discretion,

hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the Part 265 closure to a Part 264 closure. The Regional Administrator will give public notice of the hearing at least 30 days before it *45799 occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, ar the two notices may be combined.)

(ii) The Regional Administrator will determine whether the Part 265 closure me 264 closure by removal or decontamination requirements within 90 days of its receipt. If the Regional Administrator finds that the closure did not meet the applicable Part 264 standards, he/she will provide the owner/operator with a written statement of the reasons why the closure failed to meet Part 264 standards. The owner/operator may submit additional information in support of an equivalency demonstration within 30 days after receiving such written statement. The Regional Administrator will review any additional information submitted and make a final determination within 60 days.

(iii) If the Regional Administrator determines that the facility did not close in accordance with Part 264 closure by removal standards, the facility is subject to post-closure permitting requirements.

11. In § 270.4, paragraph (a) is revised to read as follows:

§ 270.4 Effect of a permit.

(a) Compliance with an RCRA permit during its term constitutes compliance for purpose of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which become effective by statute, or which are promulgated under Part 268 of this chapter restricting the placement of hazardous wastes in or on the land.

* * * * *

12. In § 270.10, paragraph (k) is added and an OMB number is added at the end of the section to read as follows:

§ 270.10 General application requirements.

* * * * *

(k) The Director may require a permittee or an applicant to submit information in order to establish permit conditions under §§ 270.32(b)(2) and 270.50(d) o: this chapter.

(Approved by the Office of Management and Budget under control numbers 2050-0009, 2050-0002, and 2050-0007)

13. In § 270.14, the introductory text of paragraph (c) is revised, paragrap: (d) is added and an OMB number is added at the end of the section to read as follows:

§ 270.14 Contents of Part B: General requirements.

* * * * *

(c) Additional information requirements. The following additional information regarding protection of groundwater is required from owners or operators of hazardous waste facilities containing a regulated unit except as provided in § 264.90(b) of this chapter:

* * * * *

(d) Information requirements for solid waste management units.

(1) The following information is required for each solid waste management unit at a facility seeking a permit:

(i) The location of the unit on the topographic map required under paragraph (b)(19) of this section:

(ii) Designation of type of unit.

(iii) General dimensions and structural description (supply any available drawings).

(iv) When the unit was operated.

(v) Specification of all wastes that have been managed at the unit, to the extent available.

(2) The owner or operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of hazardous wastes or hazardous constituents from such unit or units.

(3) The owner/operator must conduct and provide the results of sampling and analysis of groundwater, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the Director ascertains it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

(Approved by the Office of Management and Budget under control numbers 2050-0009, 2050-0002, and 2050-0007)

14. In § 270.41, paragraph (a)(3) is revised to read as follows:

§ 270.41 Major modification or revocation and reissuance of permits.

* * * * *

(a) * * *

(3) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause as follows:

(i) Director may modify the permit when the standards or regulations on which the permit was based have been changed by statute or amended standards or

regulations.

(ii) Permittee may request modification when:

(A) The permit condition to be modified was based on a promulgated regulation under Parts 124 of this chapter, Parts 260--268 of this chapter, or Part 270 of this chapter; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation on which the permit condition was based; or

(C) A permittee requests modification in accordance with § 124.5 of this chapter within 90 days after Federal Register notice of the action on which the request is based.

(iii) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA-promulgated regulations if the remand and stay concern that portion of the regulations on which the permit condition was based or if a request is filed by the permittee in accordance with § 124.5 of this chapter within 90 days of judicial remand.

* * * * *

15. In § 270.60, paragraph (b)(3) is revised and an OMB number is added at the end of the section to read as follows:

§ 270.60 Permits by rule.

* * * * *

(b) * * *

(3) For UIC permits issued after November 8, 1984:

(i) Complies with 40 CFR 264.101; and

(ii) Where the UIC well is the only unit at a facility which requires a RCRA permit, complies with 40 CFR 270.14(d).

* * * * *

(Approved by the Office of Management and Budget under control number 2050-0007)

PART 271--REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

16. The authority citation for Part 271 is revised to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926.

17. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

§ 271.1 Purpose and scope

* * * * *

TABLE 1.--Regulations Implementing the Hazardous and Solid Waste Amendments of 1984

Promulgation date	Title of regulation	Federal Register	Effective date
*	*	*	*	*
[insert date of publication]	.... Codification Rule for the 1984 RCRA Amendments	..... [insert FR reference]	..... [insert thirty days after publication.

* * * * *

[FR Doc. 87-27000 Filed 11-30-87; 8:45 am]

BILLING CODE 6560-50-M

52 FR 45788-01, 1987 WL 146581 (F.R.)
END OF DOCUMENT