



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUL 9 1984

MEMORANDUM

**SUBJECT:** Guidance for Review and Approval of State  
Underground Injection Control (UIC) Programs and  
Revisions to Approved State Programs.  
GWPB Guidance #34

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**TO:** Water Division Directors  
Regions I - X

PURPOSE

The purpose of this document is to provide guidance to EPA Regional Offices on the revised process for the approval of State primacy applications and the process for approving modifications in delegated programs, including aquifer exemptions.

BACKGROUND

On January 9, 1984, the Deputy Administrator announced an Agency policy for a State program approval process placing the responsibility on Regional Administrators to recommend UIC program approval to the Administrator and making Regional Administrators clearly responsible for assuring that "good, timely decisions are made." At the same time, we are reaching a point in the UIC program where States are beginning to make revisions to approved programs and we are promulgating amendments to the minimum requirements that the States must adopt within 270 days. We have reviewed the existing approval process and this Guidance spells out the adjustments necessary to comply with the Agency's policy. This new process will take effect on July 5, 1984, and applies to approval of primacy applications and "substantial" program revisions, which are both rulemaking and cannot be delegated by the Administrator under the Safe Drinking Water Act. This guidance also addresses review and approval of non-substantial program revisions which are the responsibility of the Regional Administrator.

I. REVIEW AND APPROVAL OF APPLICATIONS

REGIONAL ROLE

The effect of the new Agency policy is to give Regions greater responsibility for managing the delegation of EPA programs. The FY 1984 Office of Water Guidance suggests that Regions develop State-by-State delegation strategies, although formal schedules for submittal and approval of State applications are not required after FY 1984. Regions are to work with States to develop approvable applications. They are to solicit and resolve Headquarters comments, "keep the clock" on the formal review period, recommend approval to the Administrator, and are responsible for timely approvals. In this process, the Regions speak for the Agency on approval matters but are advised not to make commitments regarding unresolved major issues raised by Headquarters Offices.

Draft applications

The Regions are responsible for working with the States and getting them to submit draft applications so that problems can be identified and resolved in the early stages. The draft applications should be submitted as early as possible to Headquarters for comments, and Headquarters comments discussed with the States. (Guidelines on resolving recurring problems in State applications are included as Attachment 1.)

Final applications

Upon receipt of a final application the Regions will:

1. determine whether the application is complete, and if it is:
2. send copies of the final application to Headquarters for review, accompanied by a staff memorandum explaining how issues raised on the draft application have been resolved; (This should be done as early as possible so that Headquarters comments can be received before the public hearing.)
3. take care of the public participation process including: selecting a date for the public hearing, making the necessary arrangements for holding the hearing and publishing notice in the Federal Register;

4. work with the State to resolve all remaining issues identified either during the public participation process or by Headquarters;
5. when all issues have been resolved, prepare and transmit to Headquarters an Action Memorandum signed by the Regional Administrator recommending approval, explaining the major issues and their resolution, a Federal Register notice of the Administrator's decision, and a staff memorandum explaining how all issues have been resolved.

#### HEADQUARTERS ROLE

The policy specifies that program Assistant Administrators, the General Counsel, and the Assistant Administrator for Enforcement and Compliance Monitoring have the authority to raise issues which must be resolved prior to the approval of the State program. The policy also states that the process should include time limits for completion of reviews by all offices, that new issues should not be raised or old issues reopened unless there are material changes in the application, and that there should be some distinction between major objections which must be resolved before program approval and comments of a more advisory nature. We believe that for the sake of expeditious and consistent reviews, ODW should retain the role of coordinating Headquarters comments.

#### Draft applications, Final applications.

These and any other material for review by Headquarters should be sent to the Director, State Programs Division (SPD). The SPD will coordinate the review process with Office of General Counsel, Office of Enforcement and Compliance Monitoring and internally within the Office of Water. The Regions will be advised of the issues raised by the Review Team by a conference call between the Review Team and Regional staff. Written comments distinguishing major issues and advisory comments (if necessary) will be sent within 15 working days unless there is voluminous material to be xeroxed, in which case the review period will be extended to 20 working days. (The Region will be notified if such extension is necessary.) Written comments will be signed by the Director, State Programs Division.

Action memorandum and Federal Register Notice of Approval

These should be sent to SPD which will be responsible for obtaining the proper concurrences from all AAs involved and sending the package to AX for signature. The staff memorandum explaining resolution of all issues will be reviewed at the Review Team level within 5 working days. Assuming that all issues have been taken care of the process for obtaining all necessary signatures will take between 30 and 45 days.

## II. PROGRAM REVISIONS

### INTRODUCTION

Following EPA approval of a State UIC program, the State will from time to time make program changes which will constitute revisions to the approved program. The UIC regulations address procedures for revision of State programs at 40 CFR §145.32. These regulations direct the State to "keep the Environmental Protection Agency (EPA) fully informed of any proposed modification to its basic statutory or regulatory authority, its forms, procedures, or priorities." The regulations differentiate between "substantial" revisions which are rulemaking and must be approved by the Administrator and "non-substantial" revisions which can be approved by a letter to the Governor.

To date EPA has encountered the following types of revisions to approved State programs:

- Aquifer exemptions;
- Minor changes to the delegation memorandum of agreement;
- Regulatory and statutory changes which resulted in a more stringent program;
- Revisions to State forms which were part of the approved program;
- Transfer of authority from one State agency to another;
- Alternative mechanical integrity tests.

While providing a basic framework for program revisions, the regulations are not specific in defining "substantial" and "non-substantial" program revisions. These categories are defined below.

### Definition of Program Revisions

Revisions to State UIC programs require EPA approval or disapproval actions only if they are within the scope of the Federal UIC program. Aspects of the program which are beyond the scope of the Federal UIC regulations are not considered program revisions under §145.32. For example, if a State

modifies permitting requirements for Class V wells, this would not be considered a program revision as long as the modified requirement was at least as stringent as the Federal UIC regulations, since the regulations do not require specific permitting of Class V wells.

### "Substantial" versus "Non-substantial" Revisions

The wide range of possible program revisions and varying situations from State to State makes it impossible to establish a firm definition of what constitutes a "substantial" program revision. However, as a general rule, the following types of program revisions will be considered "substantial":

1. Modifications to the State's basic statutory or regulatory authority which may affect the State's authority or ability to administer the program;
2. A transfer of all or part of any program from the approved State agency to any other State agency;
3. Proposed changes which would make the program less stringent than the Federal requirements under the UIC regulations (or the Safe Drinking Water Act, for Section 1425 programs); and
4. Proposed exemptions of an aquifer containing water of less than 3,000 mg/l TDS which is: (a) related to any Class I well; or (b) not related to action on a permit, except in the case of enhanced recovery operations authorized by rule.

Any program revision which requires action by EPA, but which is not considered "substantial", will be a "non-substantial" revision.

### REGIONAL ROLE

#### Substantial Program Revisions

Upon determining that a program revision is substantial, the Regions will:

1. send copies of the proposed revision to SPD;
2. take care of the public participation process;
3. work with the State to resolve problems, if any;
4. prepare an Action Memorandum and a Federal Register notice of Administrator's approval.

### Non-substantial Revisions

The authority for approval of non-substantial revisions is delegated to the Regional Administrator. The Regions will forward a copy of the approval letter and of the approved revision to the State Programs Division.

### Disapproval of Program Revisions

Disapproval of a proposed State program revision may be accomplished by a letter from the Regional Administrator to the State Governor or his designee.

For all aquifer exemptions, the Region should fill out and send to the SPD an Aquifer Exemption Summary Sheet (Attachment 2). If the exemption constitutes a substantial program revision or requires ODW concurrence, as much of the supporting material as feasible should be sent along. (Large maps and logs are difficult to reproduce and may be omitted.) Aquifer exemptions that constitute substantial revisions will be handled as described above. Where ODW concurrence is necessary it will be in the nature of a telephone call from the Director, SPD, because of the potential for short approval timeframes. Approval will be confirmed later by a memorandum. Guidelines for review of aquifer exemptions are included as Attachment 3.

### Alternative Mechanical Integrity Tests

The authority to approve alternative mechanical integrity tests has been delegated to the Director, Office of Drinking Water. Therefore, such proposals and appropriate supporting documents should be submitted to the State Programs Division. The SPD will transmit them to the UIC technical Committee for review. If the Committee supports approval of the test, the Director of ODW will inform the Regions and approve the test as a "non-substantial" program revision.

## III. RESOLUTION OF DIFFERENCES

The major effect of the Agency policy should be to speed up the resolution of issues. The policy states that senior managers are responsible for assuring that early consultation takes place so that issues can be identified and resolved internally as early as possible. Regional

Administrators are responsible for elevating to top managers those issues upon which there is internal disagreement. Differences can arise within Headquarters and between Headquarters and Regions. They will be handled as follows for both program approvals and substantial program modifications.

Within the HQ review team

If the Headquarters Review Team cannot agree on whether an issue should be raised, the Review Team memorandum will reflect the majority comments. The dissenting office may send a memorandum signed by its Office Director or equivalent to the Water Division Director explaining its issue. If the Region agrees, it will raise the issue with the State. If not, the issue will be resolved using the process outlined below.

Between Headquarters and Region

1. The first step should be a Regional appeal to the "Bridge Team" (Office Directors). This can be accomplished within 10 working days. The Region should notify SPD by telephone that there is disagreement on a given issue. A Bridge Team meeting will be scheduled within 7 to 10 working days. The Region can attend the meeting, send a memorandum explaining its position, or rely on the SPD to present the Region's position. The decision of the Bridge Team will be communicated to the Region by telephone as soon as it is made, and confirmed, for the record, in a memorandum signed by the ODW Office Director with concurrence from other offices involved.
2. If this fails the Agency's "Decision-Brokering" Process should be invoked. This process is explained in detail in a February 1, 1984, memorandum from Sam Schulof. (Attachment 4)

IV. IMPLEMENTATION

This Guidance takes effect on July 1, 1984. We realize that many applications are now in the review process. For the sake of simplicity and clarity this process will only apply to those pending applications for which a public hearing has not been held or announced by that date.

Attachments

Guidelines for Resolving Recurring Problems in UIC Applications  
Aquifer Exemption Summary Sheet  
Guidelines for Reviewing Aquifer Exemption Requests  
Sam Schulhof Memorandum of February 1, 1984



GUIDELINES FOR RESOLVING RECURRING  
PROBLEMS IN UIC APPLICATIONS

Inadequate statutory authority

1. Authority to regulate all underground injection.

The regulations require that a State must have the authority to "prohibit any underground injection except as authorized by permit or by rule" 40 CFR §144.11. Many States have not enacted specific statutes parallel to the Safe Drinking Water Act (SDWA), but rely on the authority provided by statutes enacted to comply with RCRA or CWA. In such statutes the State's authority is often keyed to disposal of wastes or the regulation of pollution. If the definitions of these terms are not broad enough the State may not have the authority to regulate all classes of wells. The problem can usually be solved by the Attorney General if in his statement of legal authority he can make a colorable argument that the statutes do, in fact, give the State broad authority to regulate "non-waste" injection.

2. Authority to impose minimum requirements as stringent as the federally prescribed minimum requirements.

Even if a State can demonstrate authority over all injections, the enabling statute may not provide the authority to impose certain specific requirements. For example, a statute which simply mandates non-endangerment or protection of the "beneficial uses" of ground water may not provide the authority to impose construction requirements designed to achieve non-migration of fluids as prescribed by 40 CFR §§146.12, .22, and .32. As above, this issue can be solved by the Attorney General if he can assert that the specific technical requirements to be imposed by the State are within the authority established by the State's statute.

3. Authority on Federal lands and over Federal facilities.

State authority to regulate injection on Federal lands and by Federal agencies and facilities is explicitly required by the Act. Section 1421(b)(1)(D). Therefore, the State must demonstrate such authority.

Demonstration of authority over Federal agencies can usually be done by assuring that the State's definition of "person" or "owner or operator" includes officers or agencies of the Federal Government. At the very least, these should not be excluded from the definition, and the Attorney General should assert that the definition is broad enough to cover such entities.

As far as demonstration of authority over Federal lands is concerned, the Attorney General statement should include an explicit finding that the State has the authority to apply its UIC program on Federal lands. Furthermore, because the U.S. Geological Survey regulates some classes of wells on Federal lands, the Program Description should include a section describing the relationship between the State's and the Survey's regulatory activities.

#### 4. Authority over Indian lands.

The UIC regulations assume that implementation on Indian lands is a Federal responsibility unless: 1) the State chooses to assert jurisdiction; and 2) the State demonstrates the necessary legal authority.

Several States which have asserted jurisdiction over Indian lands have relied on the fact that they have regulated non-Indian operators on these lands for years. This does not constitute an acceptable demonstration. There needs to be a discussion in the AG statement explaining the basis for the State's authority. A simple assertion from the Attorney General does not suffice since he is not simply interpreting State law but discussing relationships between State and Federal jurisdictions. The application must include the treaties or Federal statutes which grant the State such authority and the text of any opinions in any court case in which the State's authority in this regard was tested.

#### Inadequate demonstration under 40 CFR §145.21.

Pursuant to 40 CFR §145.21(d), a State need not develop a full regulation for a given class of wells if the State can demonstrate that no wells of the class exist, and that none can legally occur.

The demonstration that no well of a given class exist should be based on a reliable inventory or on geological or hydrological facts, and not be an unsubstantiated assertion.

The determination of whether a class of wells cannot legally occur is a matter of State law, and EPA will rely to a large extent on the interpretation of State law and regulations in determining whether the State has met the standard. Such a demonstration need not be made by any single set of circumstances. In all cases the State must have statutory authority over the class of wells. Where the State has an explicit statutory or regulatory prohibition of the class of well this obviously is an adequate demonstration. Where the State has no regulations the State might make the demonstration by showing that no injection may be authorized without a permit and that under law the State cannot issue permits (even if requested) in the absence of regulations.

Where the State does have applicable regulations the State might make the demonstration that no injection may occur without a permit by agreeing with EPA not to issue any permits and by showing that the State has the absolute discretion to make such an agreement. Other types of demonstrations may also be possible if they accurately reflect State law as stated by the Attorney General.

Inadequate definition of the resource to be protected.

1. Definition of underground sources of drinking water.

The Federal regulations define underground sources of drinking water (USDWs) explicitly at 40 CFR §144.3. A number of statutes that we have reviewed authorize the State agency to protect "waters of the State" or "fresh water". These terms leave a great deal of discretion to the State agency to define the resource to be protected. The discretion should be tied down in the regulations which should use EPA's definition. If this cannot be done then, at the very least, the State should agree in the MOA to interpret its definition as being as broad or broader than EPA's and the Attorney General statement should certify that it is within the State's authority to do so.

2. Aquifer exemptions.

In some States, Class II and III operations may be taking place in aquifers containing less than 10,000 mg/l TDS. These aquifers must be exempted in accordance with 40 CFR §146.04 in order for these operations to remain legal. All information necessary for EPA to approve the exemptions should be included in the application. This includes a demonstration that the aquifer is not currently used and that it meets one of the criteria of §146.04(b). The aquifer must also be identified in terms of areal extent and depth.

3. EPA role in subsequent exemptions.

There must be a clear agreement on the part of the State that exemptions subsequent to approval of the State program will be treated in accordance with 40 CFR §144.7(b)(3). If this is not clear in the State's regulations, the State should address the question in the MOA. EPA will consider some flexibility in the process for approval of these exemptions and the timing of EPA's actions.

Inadequate permitting process.

So far the major problems that we have encountered with regard to permits have been the level of public participation in the

permitting process and the possibility of permits issuing by default.

1. Public participation.

Some State statutes limit the definition of interested parties to such entities as "adjacent landowners" or "mineral rights owners". EPA's regulations require that the general public be informed of permit applications and given the right to comment. This problem can usually be solved by the State agreeing in the MOA to taking whatever additional measures are necessary to assure adequate participation by the public.

2. Default permits.

Several States have statutes which require permit applications to be acted upon within a stated period of time. These requirements must be scrutinized with care. If the effect of the requirement is that a permit automatically issues at the default deadline, the State would not be able to demonstrate that no injection that could endanger underground sources of drinking water will be authorized. In this case, there is little recourse but to get the State to amend its statutes. If, however, the deadline simply compels the State to act, but the State can still require all necessary permit conditions, and assure adequate public participation before the permit is issued, the deadline may be acceptable.

The Attorney General statement should explicitly address the effect of such statutory sections and certify that the State can in all cases impose appropriate permit conditions or deny the permit if such action is warranted.

Inadequate authorization by rule.

If any injection wells are in operation in a State at the time the State's UIC program is approved, these wells become illegal unless permitted or authorized by rule. Since all wells cannot be permitted immediately upon the effective date of the State program the State regulations must contain the language of a rule clearly authorizing the wells to continue operation for a given period of time and spelling out the requirements with which an operator must comply. In some cases however, an existing State permit program already submits owners and operators to the requirements of EPA's authorization by rule. If these permits continue in effect until UIC permits are issued, the State need not authorize wells by rule.

Where applicable the Attorney General statement must certify that the State has the authority to authorize injection by rule and to impose the specific requirements. We have reviewed several programs where the statutes seemed to give the State

only the authority to require permits. The Attorney General should then explain how the State can authorize by rule. A possibility is to state that rules are a form of permits.

Inadequate enforcement authority.

The State statutes should provide for the enforcement mechanisms and civil and criminal penalties in at least the amounts specified in 40 CFR §145.12. EPA may make an exception to these requirements for: 1) Class I, II or III wells where banned, 2) Class II wells covered under §1425; and 3) Class V wells. Furthermore, the State's authority should not be limited by the use of qualifiers such as "willfully" or "knowingly" in the language of the statutory provisions. If a State statute is lacking in regard to any of these provisions it is very difficult to resolve the problem without legislative changes. It is sometimes possible to find other environmental statutes that could provide the necessary penalty authority. The Attorney General must certify that these authorities can be applied to violations of the UIC program.

Finally, the State must have the ability to enforce both against violations of the terms of a permit and violations of the statutes and regulations in general. If the statutes do not explicitly provide that ability and the Attorney General cannot provide a satisfactory argument that the State somehow has this ability, legislative changes may be necessary.

Problems with incorporation by reference

EPA supports the concept of State incorporation by reference of the Federal regulations where the Attorney General can assert that it is consistent with State law. However, if the Federal regulations were ever amended it would be difficult for operators in the State to locate a definite body of regulations that constituted the regulations legally effective in the State. The State may consider actually printing out the language of the Federal regulations in the State administrative code.



**AQUIFER EXEMPTION  
SUMMARY SHEET**

Date application received in Region: \_\_\_\_\_

Date application sent Headquarters: \_\_\_\_\_

Date action needed: \_\_\_\_\_

APPLICANT: \_\_\_\_\_

HEARING DATE: \_\_\_\_\_

I.D. NUMBER: \_\_\_\_\_

EXEMPTION DESCRIPTION (Township, Range, Section, Quarter section and affected area):

FIELD: \_\_\_\_\_

AQUIFER TO BE EXEMPTED: \_\_\_\_\_

JUSTIFICATION FOR EXEMPTION:

- ( ) Aquifer is not a source of drinking water and will not serve as a source of drinking water in the future because it:
  - ( ) Has a TDS level above 3,000 and not reasonably expected to serve as a source of drinking water
  - ( ) Is producing or capable to produce hydrocarbons
  - ( ) Is producing or capable to produce minerals
  - ( ) Is too deep or too remote
  - ( ) Is above Class III area subject to subsidence
  - ( ) Is too contaminated (name contaminant(s)):
  - ( ) Other: \_\_\_\_\_

PURPOSE OF INJECTION: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

APPLICANT: \_\_\_\_\_

HEARING DATE: \_\_\_\_\_

I.D. NUMBER: \_\_\_\_\_

INJECTED FLUID QUALITY: \_\_\_\_\_ INJECTION FLUID SOURCE: \_\_\_\_\_

FORMATION WATER QUALITY: \_\_\_\_\_

OIL OR MINERAL PRODUCTION HISTORY: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACTIVE INJECTION WELLS INJECTING INTO SAME FORMATION

<u>Field</u>	<u>Location</u>	<u>Injection Interval</u>	<u>Injection Source</u>	<u>Total Depth</u>
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WATER USE IN AREA: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



GUIDELINES FOR REVIEWING  
AQUIFER EXEMPTION REQUESTS

BACKGROUND

The Consolidated Permits Regulations (40 CFR §§146.04 and 144.7) allow EPA, or approved State programs with Environmental Protection Agency (EPA) concurrence, to exempt underground sources of drinking water from protection under certain circumstances. An underground source of drinking water may be exempted if:

1. It does not, currently serve as a source of drinking water and;
2. It cannot now and will not in the future serve as a source of drinking water because:
  - (a) It is mineral, hydrocarbon, or geothermal energy producing, or it can be demonstrated by a permit applicant as a part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible;
  - (b) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;
  - (c) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or
  - (d) It is located over a Class III well mining area subject to subsidence or catastrophic collapse; or
3. The Total Dissolved Solids content of the ground water is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.

Regulations at 40 CFR §144.7(b)(1) state that "The Director may identify (by narrative description, illustrations, maps or other means) and describe in geographic and/or geometric terms (such as vertical and lateral limits and gradient) which are clear and definite all aquifers or parts thereof which the Director preposes to designate as exempted aquifers. . ." If an exemption is proposed under 40 CFR §146.04(b)(1), the applicant for a Class II or III injection well permit must submit information to demonstrate "commercial producibility." To

demonstrate producibility the applicant for a Class III injection well permit may provide a map and general description of the mining zone, analysis of the amenability of the mining zone to the proposed mining method, and a production timetable. Applicants for an exemption for a Class II injection well may demonstrate producibility by providing information such as logs, core data, drill stem test information, a formation description, and oil data for the well in question or surrounding wells.

Except as listed above, the regulations do not specify technical criteria for the EPA to judge aquifer exemption requests. The EPA therefore developed the following technical criteria. These criteria include general information requirements common to all aquifer exemption requests. These are followed by specific criteria to evaluate each type of exemption request listed above.

EPA will approve aquifer exemptions for only specific purposes. All exemption request approvals will include a description of injection activities allowed and a statement that additional approvals would be needed for other injection activities (e.g., hazardous waste disposal into an aquifer exempted for mineral production).

#### EVALUATION CRITERIA

##### General

Applicants requesting exemptions must provide the following general information:

1. A topographic map of the proposed exempted area. The map must show the boundaries of the area to be exempted. Any map which precisely delineates the proposed exempted area is acceptable.
2. A written description of the proposed exempted aquifer including:
  - (a) Name of formation of aquifer.
  - (b) Subsurface depth or elevation of zone.
  - (c) Vertical confinement from other underground sources of drinking water.
  - (d) Thickness of proposed exempted aquifer.
  - (e) Area of exemption (e.g., acres, square miles, etc.).
  - (f) A water quality analysis of the horizon to be exempted.

In addition to the above descriptive information concerning the aquifer, all exemption requests must demonstrate that the

aquifer ". . . does not currently serve as a source of drinking water." (40 CFR §146.04(a)). To demonstrate this, the applicant should survey the proposed exempted area to identify any water supply wells which tap the proposed exempted aquifer. The area to be surveyed should cover the exempted zone and a buffer zone outside the exempted area. The buffer zone should extend a minimum of a 1/4 mile from the boundary of the exempted area. Any water supply wells located should be identified on the map showing the proposed exempted area. If no water supply wells would be affected by the exemption, the request should state that a survey was conducted and no water supply wells are located which tap the aquifer to be exempted within the proposed area. If the exemption pertains to only a portion of an aquifer, a demonstration must be made that the waste will remain in the exempted portion. Such a demonstration should consider among other factors, the pressure in the injection zone, the waste volume, injected waste characteristics (i.e., specific gravity, persistence, etc.) in the life of the facility.

#### Specific Information

§146.04(b)(1) It cannot now and will not in the future serve as a source of drinking water because: it is mineral, hydrocarbon, or geothermal energy producing or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.

If the proposed exemption is to allow a Class II enhanced oil recovery well or an existing Class III injection well operation to continue, the fact that it has a history of hydrocarbon or mineral production will be sufficient proof that this standard is met. Many times it may be necessary to slightly expand an existing well field to recover minerals or hydrocarbons. In this case, the applicant must show only that the exemption request is for expanding the previously exempted aquifer and state his reasons for believing that there are commercially producible quantities of minerals within the expanded area.

Applicants for aquifer exemptions to allow new in-situ mining must demonstrate that the aquifer is expected to contain commercially producible quantities of minerals. Information to be provided may include: a summary of logging which indicates that commercially producible quantities of minerals are present, a description of the mining method to be used, general information on the mineralogy and geochemistry of the mining zone, and a development timetable. The applicant may also identify nearby projects which produce from the formation proposed for exemption. Many Class III injection well permit applicants may consider much information concerning production potential to be proprietary. As a matter of policy, some States do not allow any information submitted as part of a permit application to be confidential. In those cases where potential production information is not being submitted, it may be necessary for EPA to participate

with the State in discussions with the applicant to obtain sufficient evidence to indicate that the ore zone is commercially producible. The information to be discussed would include the results of any R & D pilot project.

Exemptions relating to any new Class II wells which will be injecting into a producing or previously produced horizon should include the following types of information.

- a. Production history of the well if it is a former production well which is being converted.
- b. Description of any drill stem tests run on the horizon in question. This should include information on the amount of oil and water produced during the test.
- c. Production history of other wells in the vicinity which produce from the horizon in question.
- d. Description of the project, if it is an enhanced recovery operation including the number of wells and their location.

§145.04(b)(2) It cannot now and will not in the future serve as a source of drinking water because: It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical:

EPA consideration of an aquifer exemption request under this provision would turn on: The availability of alternative supplies, the adequacy of alternatives to meet present and future needs, and a demonstration that there are major costs for treatment and or development associated with the use of the aquifer.

The economic evaluation, submitted by the applicant, should consider the above factors, and these that follow:

1. Distance from the proposed exempted aquifer to public water supplies.
2. Current sources of water supply for potential users of the proposed exempted aquifer.
3. Availability and quality of alternative water supply sources.
4. Analysis of future water supply needs within the general area.
5. Depth of proposed exempted aquifer.
6. Quality of the water in the proposed exempted aquifer.

7. Costs to develop the proposed exempted aquifer as a water supply source including any treatment costs and costs to develop alternative water supplies. This should include costs for well construction, transportation, water treatment, etc., for each source.

§146.04(b)93) It cannot now and will not in the future serve as a source of drinking water because: It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption.

Economic considerations would also weigh heavily in EPA's evaluation of aquifer exemption requests under this section. However, unlike the previous section, the economics involved would be controlled by the cost of technology to render water fit for human consumption. Treatment methods can usually be applied to render water potable. However, costs of that treatment may often be prohibitive either in absolute terms or when compared to cost to develop alternative water supplies.

EPA's evaluation of aquifer exemption request under this section will consider the following information submitted by the applicant:

1. Concentrations and types of contaminants in the aquifer.
2. Source of contamination.
3. Whether the contamination source has been abated.
4. Extent of contaminated area.
5. Probability that the contaminant plume will pass the proposed exempted area.
6. Availability of treatment to remove contaminants from water.
7. Chemical content of proposed injected fluids.
8. Current water supply in the area.
9. Alternative water supplies.
10. Costs to develop current and probable future water supplies, and cost to develop water supply from proposed exempted aquifer. This should include well construction costs, transportation costs, water treatment costs, etc.
11. Projections on future use of the proposed aquifer.

§146.04(b)(4) It cannot now and will not in the future serve as a source of drinking water because: It is located over a Class III mining area subject to subsidence or catastrophic collapse:

An aquifer exemption request under this section should discuss the proposed mining method and why that method necessarily causes subsidence or catastrophic collapse. The possibility that non-exempted underground sources of drinking water would be contaminated due to the collapse should also be addressed in the application.

§146.04(c) The Total Dissolved Solids content of the ground water is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.

An application under this provision must include information about the quality and availability of water from the aquifer proposed for exemption. Also, the exemption request must analyze the potential for public water supply use of the aquifer. This may include: a description of current sources of public water supply in the area, a discussion of the adequacy of current water supply sources to supply future needs, population projections, economy, future technology, and a discussion of other available water supply sources within the area.



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

FEB 1 1984

THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Implementation Guidance for Decision-Brokering

FROM: Sam Schulhof  
Associate Administrator for Regional Operations

TO: Assistant Administrators  
General Counsel  
Regional Administrators

This guidance is furnished as part of the overall implementation of the new Decision-Brokering Process and the Policy on the State Program Approval Process which Al Alm signed January 9, 1984.

It is designed to answer many of the questions which may come up over the next several weeks as we place this decision into effect. I hope it is of value to you and your staff.

Please call me, Barbara Ludden, or Chuck Kent if you have any further questions.

Attachment





## IMPLEMENTATION GUIDANCE FOR DECISION-BROKERING

February 1, 1984

This document supplements the Deputy Administrator's memo of January 9, 1984 approving the new policy on the state program approval process. It is intended as background information for those who are responsible for implementation of the new policy, or anyone seeking resolution of major issues through the decision-brokering process.

### WHAT IS DECISION-BROKERING?

Decision-brokering is a new mechanism to facilitate the identification, elevation, and rapid resolution of policy issues which cannot be resolved at the AA or RA level. The objective of decision-brokering is to enable agency officials to focus top management attention on policy questions which are most appropriately addressed by the Administrator/Deputy Administrator and which would cause critical delays if left to be resolved through normal channels.

### WHO MAY INVOKE THE DECISION-BROKERING PROCESS?

Any Regional Administrator, Assistant Administrator, or the General Counsel may raise policy issues through the decision-brokering process. It is intended to be used in those circumstances where top officials are unable to reach agreement on a major, urgent issue within a reasonable time period.

In the case of state program approvals, each program will work closely with the Regional Offices to establish in advance the timing and duration of the headquarters review of state applications. A specific time limit may also be set on the amount of time considered "reasonable" for resolving differences, given the particular schedules imposed on each program. The initiation and tracking of this review will be the responsibility of the Regional Administrators.

Since the RA will be the "keeper of the clock", he or she will normally be the official to invoke the decision-brokering process in the rare event that a major issue is raised during the review that cannot be resolved between the RA and the commenting official. However, any of the parties may invoke the process.

### WHO RUNS THE PROCESS AND WHAT IS HIS/HER ROLE?

The Deputy Administrator has designated the Associate Administrator for Regional Operations to serve as the manager of the decision-brokering process. His role is to oversee the implementation

of the new process--including its specific application to the state program approval process--and to serve as the "broker" for any issues that are raised for top management resolution. The process manager, or broker, is a neutral party responsible for focusing the discussion on key issues, ensuring even-handed presentation of all sides of the question(s) being placed before the Administrator/Deputy Administrator, and pressing for rapid resolution. There may be occasions where issues will be resolved in the early stages of decision-brokering, perhaps with the assistance of the process manager--however, the broker's primary role is that of a facilitator rather than a mediator.

**HOW DOES DECISION-BROKERING RELATE TO THE NEW POLICY ON THE STATE PROGRAM APPROVAL PROCESS?**

Decision-brokering is a generic issue resolution process intended to apply to any subject area. However, since it is a new process, it is being applied as a pilot to the state program approval process.

Experience gained in this way may facilitate the application of decision-brokering to other policy issues which require expedited top management attention.

**HOW DOES THIS NEW POLICY RELATE TO THE UPCOMING POLICIES ON DELEGATION AND OVERSIGHT OF STATE PROGRAMS?**

These three policy statements have been closely coordinated by the Deputy Administrator as part of a larger effort to clarify and restructure the roles of federal and state government in carrying out environmental protection programs. The Delegation and Oversight Policies will address general agency objectives, while this policy focuses specifically on the process for reviewing state program applications.

**WHEN WILL THIS NEW POLICY TAKE EFFECT?**

The policy on the state program approval process will take effect at different times within each program affected. Implementation will be complete when a program has made the necessary changes in the Delegations Manual, in program guidance and procedural documents, and when agreement has been reached between headquarters and regional offices on the details of the change. Until that time, the Program and Regional Offices should continue to press ahead with the state applications under review.

The decision-brokering process is effective immediately. However, its applicability to the state program approval process will phase in as implementation steps are taken in each program office.

**WHAT ARE THE NEXT STEPS?**

Attachment C to the Deputy Administrator's memo of January 9, 1984

outlines the basic steps of implementation. Specifically, they are:

1. DESIGNATION OF CONTACTS. Each AA is responsible for providing to the process manager the name and phone number of the key staff contact for each program affected within one week of the signature date.

2. PLANNING MEETINGS. Program contacts are to meet with the Associate Administrator for Regional Operations or his staff to outline the changes required for each program and develop a general timeline for implementation.

3. ACTION PLANS. Programs will submit action plans within two weeks of the planning meeting detailing the steps to be taken and the dates by which they will be completed. National Program Managers will be expected to maintain close consultation with the Regional Offices in developing and carrying out these plans.

4. ACTION PACKAGES. As one of the steps of the action plans, each program manager will submit to the process manager information copies of the package of proposed changes as worked out with the regions and other affected parties.

5. FORMAL CHANGE AND NOTIFICATION. Once the necessary changes are in place, each Assistant Administrator will notify the Associate Administrator for Regional Operations and all participants in the state program approval process, including the states, as to the effective date of the new process. Wherever possible, this will be timed to precede or coincide with the April 1 implementation target set by the HQ/Regional Task Force.

WHO IS THE PRINCIPAL STAFF CONTACT IN THE OFFICE OF REGIONAL OPERATIONS?

Barbara Ludden (382-4719) will serve as the principal staff contact in the Office of Regional Operations. She will be assisted during the implementation phase by Chuck Kent (382-5355) and Betsy Shaw (382-5357) of the Office of Management Systems and Evaluation.

WITH THE SHIFT OF SIGNATURE AUTHORITY ON STATE PROGRAM APPROVALS TO THE REGIONAL ADMINISTRATORS, WHAT IS HEADQUARTERS' ROLE?

Headquarters continues to have a strong role in the process appropriate to the responsibility for maintaining national consistency and quality. This responsibility will be carried out in three different ways: 1) clearly specifying the conditions for state program approval in the regulations, guidelines, and program procedures; 2) actively participating in the Agency workgroups which work with states to draft program applications --as well as constant communication with program personnel in

the regions who are performing this work; 3) and raising significant issues during the time-limited headquarters review--stopping approval decisions where necessary--to ensure the authorization of strong, quality environmental programs in the states.

#### WHAT ARE THE REGIONS EXPECTED TO DO DIFFERENTLY?

Regional Administrators and their staff will hold greater responsibility for the quality of the state programs seeking approval. In addition to a detailed understanding of Agency and program policies, this decision will require increased staff effort at the regional level to work with the states to obtain the desired results and to review the state applications with great care. Regional program staff will also be expected to maintain good communication links with headquarters and to ensure sufficient headquarters participation in state negotiations to avoid surprises when applications reach headquarters for the final review.

Since the adequacy of state statutes and regulations is often a crucial element in program reviews, early and intensive involvement is expected by the Regional Counsels to ensure that the states' legal authorities meet minimum federal standards.

#### HOW WILL THE SPECIFIC TIME-LIMITED HEADQUARTERS REVIEW PERIODS BE SET?

Each Assistant Administrator will see that schedules are negotiated with the Regional Administrators which specify the timing and the duration of the time-limited headquarters review periods called for in this policy. Following review by the process manager, the results of these negotiations will be written into program guidance and procedures by each program.

#### WHAT RECOURSE WILL THE REGIONAL ADMINISTRATORS HAVE IF HEADQUARTERS EXCEEDS THE TIME LIMITS?

In addition to the mechanisms already available, Regional Administrators are encouraged to contact the Associate Administrator for Regional Operations or the Deputy Administrator when critical decisions are being held up in this way. The Deputy Administrator intends to track these decisions in the Action Tracking System, and include serious delays in the performance evaluations of these managers.

#### WHAT IS THE MINIMUM ACCEPTABLE TIME ALLOWED FOR REVIEW OF STATE APPLICATIONS IN HEADQUARTERS?

While each program might have unique reasons for establishing different time periods for headquarters review of state applications, the minimum time should be no shorter than 10 working days except in the most unusual circumstances. In no case should the material be new to headquarters reviewers, since

copies of all key correspondence and drafts are to be shared with HQ in advance.

**IF AN ISSUE REACHES THE DECISION-BROKERING STAGE, HOW MUCH DOCUMENTATION WILL BE EXPECTED BY THE ADMINISTRATOR/DEPUTY ADMINISTRATOR TO SUBSTANTIATE THE DIFFERENT POSITIONS?**

The decision-broker's primary job is to ensure rapid but responsible decision-making. Wherever possible, the key issues and information should be presented in briefing form, but much of the communication will be verbal as well. Where written material is prepared, the decision-broker will expect issue papers to summarize the concerns of each side in five pages or less.

Issues reaching this stage in the decision process are expected to be fully staffed out and considered by state, regional, and headquarters officials. Decision-brokering is not intended to reexamine or reopen their decisions, but to offer top management a policy choice on issues which cannot be resolved by these officials.

**WILL THE PARTIES TO A POLICY DISPUTE PARTICIPATE IN THE DECISION MEETING WITH THE ADMINISTRATOR/DEPUTY ADMINISTRATOR?**

Yes, they are the principals. The decision broker is responsible for developing a fair, even-handed presentation of the issues. The appropriate Regional Administrators, Assistant Administrators, and the General Counsel will meet with the Administrator or Deputy Administrator to review the facts and respond to questions.

**WILL HEADQUARTERS HAVE CONCURRENCE OVER THE DETERMINATION OF COMPLETENESS OF A STATE APPLICATION?**

The decision determining whether a state application is complete is often pivotal. Since this step precludes raising many of the questions for which headquarters maintains responsibility, it should not be taken without headquarters concurrence. For example, in the NPDES program, this step retroactively starts a 90 day clock from the date of submission. Thus, headquarters concurrence is logical to allow control over the short time frames allowed in the statute.

**WILL REGIONAL ADMINISTRATORS COMMUNICATE SEPARATELY WITH HQ REVIEWERS OR DEAL INDEPENDENTLY WITH EACH OF THEM?**

The RA has the option of dealing separately with the National Program Manager, the General Counsel, and the Office of Enforcement and Compliance Monitoring. However, there may be advantages to coordinating headquarters comments through a single office. This can be spelled out in procedural guidance for each program,

or left to the most appropriate ad hoc arrangements. In the case of the 404 Program, where many federal agencies are involved in the review process, it makes sense for headquarters to continue to coordinate their comments.

HOW DOES THIS DECISION AFFECT PROGRAMS LIKE CONSTRUCTION GRANTS WHICH HAVE BEEN FULLY DELEGATED TO THE REGIONAL ADMINISTRATORS FOR SOME TIME?

Under this policy, the Assistant Administrators have the discretion to maintain full delegation, or to add, then waive their review authority. In the case of construction grants, the air program, and certain classes of minor program revisions, headquarters is expected to continue the policy of leaving these decisions to the RAs.

UNDER DECISION-BROKERING, ONCE THE ADMINISTRATOR/DEPUTY ADMINISTRATOR DECIDES AN ISSUE, WHO SIGNS THE ACTION PACKAGE?

The Regional Administrator will be responsible for signing state program approvals or other packages which explain or implement Agency decisions on state programs.

HOW WILL THIS DECISION AFFECT PROGRAMS WHERE THE ADMINISTRATOR IS REQUIRED BY STATUTE TO SIGN STATE PROGRAM APPROVALS?

In the case of the UIC program, where the Administrator must sign off on state program approvals, the Regional Administrator will be responsible for recommending to the Administrator when and if a state program should be authorized after the appropriate review steps are completed.

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

SEP 3 1986

OFFICE OF  
WATER

MEMORANDUM

SUBJECT: Guidance on Aquifer Exemptions

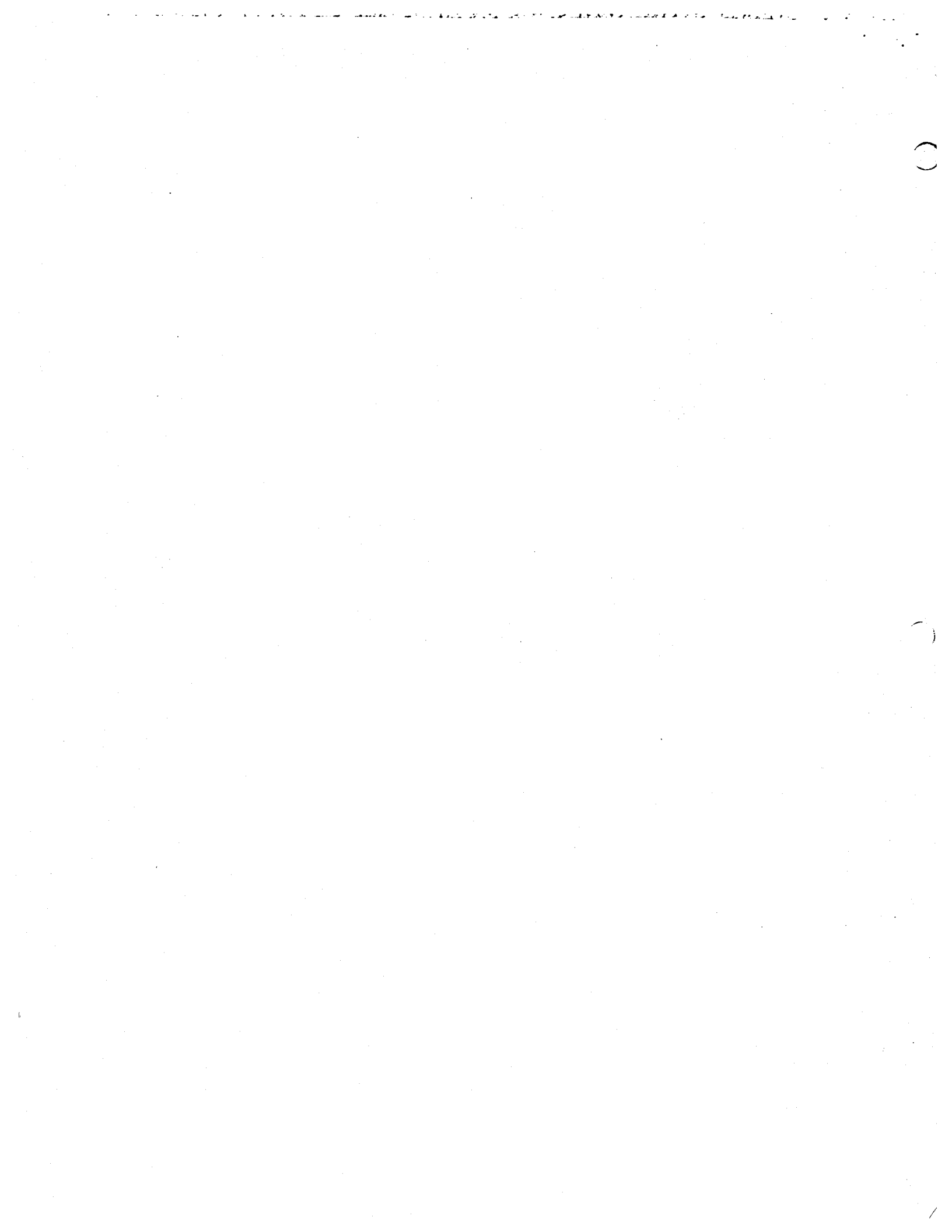
FROM: *for* Paul M. Baltay, Director  
State Programs Division (WH-550E)

*Carl Reever*

TO: Water Supply Branch Chiefs  
Regions I - X

Attached is a recent memorandum from Mike Cook to Chuck Sutfin. It clarifies the delegation of decisions on minor aquifer exemptions to the Regional Administrator. I am sending you a copy because this guidance is of general interest to all UIC programs.

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

AUG 28 1986

OFFICE OF  
WATER

MEMORANDUM

**SUBJECT:** Determination of Aquifer Exemption Requests  
**FROM:** Michael B. Cook, Director  
Office of Drinking Water *Michael B Cook*  
**TO:** Charles H. Sutfin, Director  
Water Management Division - Region V

You recently informed us that American Cyanamid had requested an aquifer exemption in connection with a facility in Indiana, where it operates Class V wells, and asked for guidance on who in the Agency is empowered to approve or deny the exemption. Based on the information your staff has supplied, the action is a "minor" exemption. As such, your Regional Administrator has been delegated the authority to approve or deny the request.

Section 144.7(b)(3) of the Underground Injection Control (UIC) program regulations clearly states:

Subsequent to program approval or promulgation, the Director may, after notice and opportunity for a public hearing, identify additional exempted aquifers.

This sentence explicitly empowers the Regional Administrator (the "Director") to approve or deny the exemption of certain aquifers in a direct implementation (D.I.) State.

The rest of paragraph (b)(3) specifies that in primacy States, the action of the State Director must be approved by EPA. As a result of the litigation settlement in 1981, the paragraph also details EPA's review process of primacy State actions in cases where EPA is given only 45 days to act. This material does not apply to D.I. programs.

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The question of the extent to which the Regional Administrator's action to approve or deny an aquifer exemption request in a direct implementation State needs to be approved at Headquarters is most directly addressed in the preamble to the proposal of the first D.I. regulations (48 FR 40108, September 2, 1983). The preamble distinguishes between "major" and "minor" exemptions and between "substantial" and "non-substantial" program revisions for primacy States. Major exemptions, i.e., substantial program revisions, must be approved by the Administrator as formal rulemaking. Minor exemptions may be approved by the Regional Administrator after notice and opportunity for hearing and comments. Turning to D.I. programs, the preamble continues:

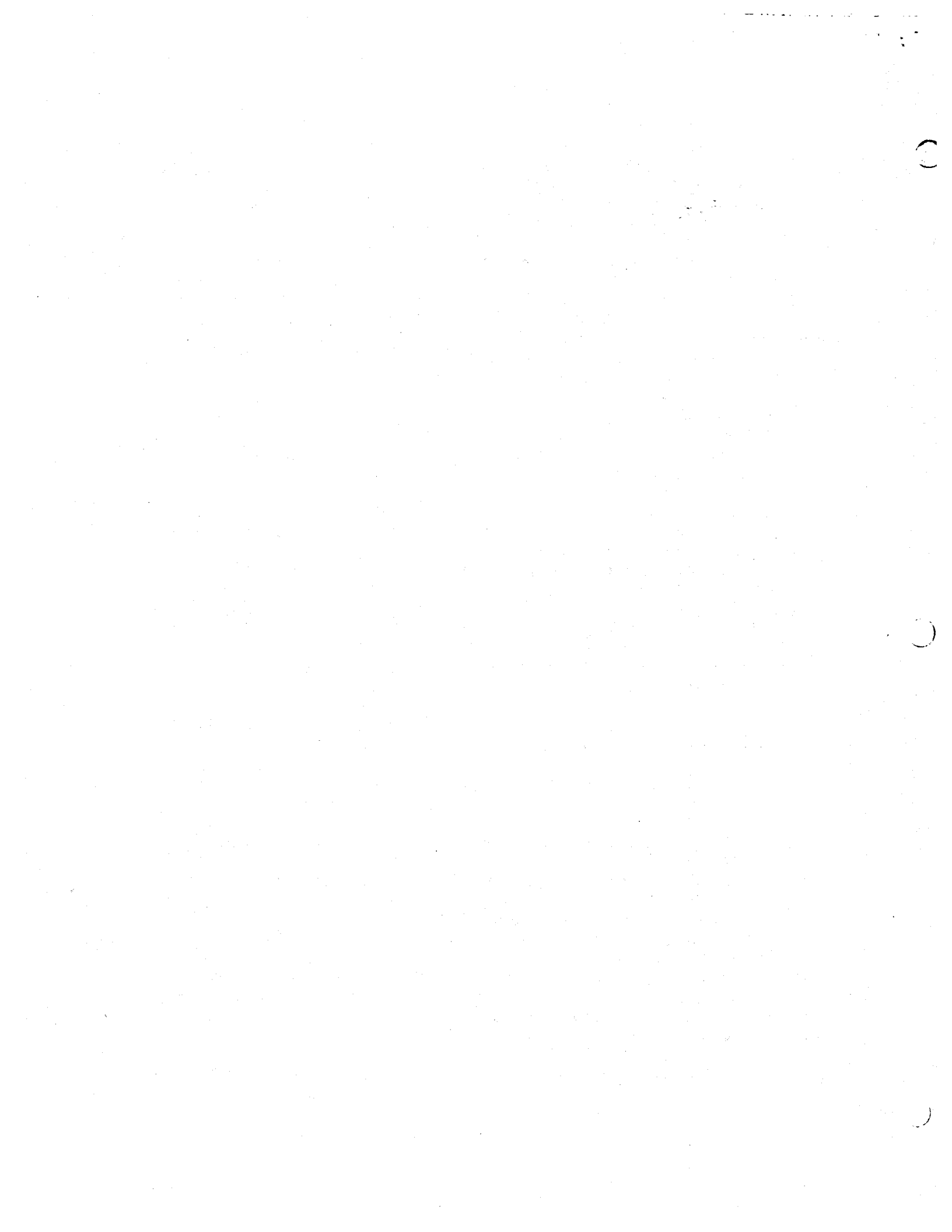
Although the program revision concept in §144.7 does not apply directly to federally-administered programs, EPA believes that a similar approach should be taken in the latter case as well.

Logically, if it is appropriate for the Regional Administrator to approve minor exemptions initiated by a primacy State, it is appropriate for him to make the parallel decision in D.I. programs. The preamble also specifies that minor exemption actions do not require publication in the Federal Register. Minor exemptions may be combined with the associated permit review (being a part of a single permitting action is one of the definitions of a minor exemption) and the due process offered on the draft permit or denial suffices for the aquifer exemption as well.

This preamble described the review process in some detail because the Agency wanted to notify the regulated community and the concerned public about its intentions. The approach was confirmed, with minor adjustments, in the promulgation (49 FR 20143). It represents Agency policy and guidance.

I would like to offer a caution on two items included in the draft materials you sent us for review. The first item is a comment which seemed to imply that a denial of the aquifer exemption would terminate the authority to inject. Class V wells are authorized by rule and can lose authorization to inject for a variety of reasons, for example, for failure to submit inventory information or the denial of a permit application. However, the denial of the aquifer exemption request does not, by itself, terminate authorization to inject. By definition, Class V wells inject into or above USDWs. The second comment relates to your intentions to codify the results of this action in Part 147. Any insertion into the Code of Federal Regulations would appear to be the prescription

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of a regulation requiring signature by the Administrator.  
Consequently, we recommend strongly against codification.

Staff of the Office of General Counsel have reviewed this  
guidance and agree with its interpretations.

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