WEST VIRGINIA WATER RESOURCES BOARD

JUNE 16, 1986

GROUNDWATER
Advisory Committee Formation

The purpose of today's meeting is to bring together a diverse body of interests capable of advising both the regulatory and administrative agencies involved in groundwater protection. Solicited are your comments, suggestions, expertise and experience as they relate to the regulaton of groundwaters in West Virginia. Also solicited is a portion of your time and effort in order to meet on various occassions and report or express the various aspects form your field or point of view.

This meeting is being held to generate discussion; feel free to comment at any time. Today it is hoped that we might establish (1) points of reference, (2) membership or suggested membership of an advisory committee, (3) timing and milestone dates and (4) a charge for the committee.

(1) POINTS OF REFERENCE

In order to formulate state-wide regulations certain factors or issues must be considered. Many questions must be asked and answered. Three broad issues are most apparent:

A. Policy
B. Strategy
C. Implementation of strategy and policy (Regulation)

Generally these need to follow the order in which they are listed. At this point however, the WRB would like more information on various stategies (B) and implementation techniques (C) before an overall policy (A) is developed. Some guidance on policy may already exist in State statutes. Regulation (C) would always come last.

(2) MEMBERSHIP OF ADVISORY COMMITTEE

We request your input on size and makeup of a thorough (well representative of the interests) yet manageable committee.

(3) TIMING.

-What is realistic?
-Could this committee make some formal recommendation to the Board by the end of the year?
-Is one meeting each month (6 in all) too little or too much?
-Milestone dates?

(4) CHARGE OF THE COMMITTEE.

O.K.

Basic charge: to make a recommendation to the Water Resources Board on the need, extent and appropriate method of establishing rules for the protection of groundwater qualtiy and appropriate usage thereof.

ACTION:
(A) Review the programs of other states (22)
-Approaches, policies, classification schemes, monitoring programs, etc.
(B) Determine what is presently regulated.
-types of pollutants, specifics of state and federal acts, geographic areas, etc.
(C) Determine status of existing data.
-Wells, aquifers, groundwater quality, uses, major drainage basins, etc.

STEPS IN DESIGNING A COMPREHENSIVE STATE
GROUNDWATER QUALITY PROTECTION PROGRAM

TABLE 3.

| | | | | |
|---|---|---|---|---|
| Step 1 */ | | | | |
| ESTABLISH A PROTECTION POLICY | Non Degradation: to maintain existing, natural groundwater quality. | Limited Degradation: to maintain as high a level of protection as possible, though allowing degradation up to a protection standard. | Differential Protection: to protect groundwater to the extent required to satisfy present and future needs | |
| Step 2 */ | | | | |
| ADOPT MANAGEMENT STRATEGY OR STRATEGIES | Uniform Management: apply controls equally to all aquifers | Contaminant and Source Management: focus on sources and chemicals causing most serious contamination. | Recharge Zone Protection: focus on recharge (replenishment) areas. | Aquifer Classification: rank aquifers according to use, and quality. Apply controls matched to use and quality. |
| Step 3 **/ | | | | |
| SELECT MIX OF PROTECTION TECHNIQUES TO IMPLEMENT POLICIES AND STRATEGIES | Groundwater Quality Standards: set desired levels of overall groundwater quality. | Regulations for Groundwater Users: applied to the extraction or withdrawal of groundwater. Includes well drilling and siting requirements, withdrawal permits, and recyling rules. | Source-Oriented Controls: applied directly to sources of contamination. Includes permits, effluent limitations, discharge zones, facility design standards, and controls for non-point sources. | Land Use Controls: govern use of land overlying groundwater. Includes zoning restrictions, siting requirements, and public acquisition. |

*/ A State may adopt only one policy and strategy, or any combination or hybrid that suits its needs. In some cases a state may adopt different policies and strategies for different regions of the state due to variations in hydrogeology or economic activities.

**/ A State may adopt mix of protection techniques that it deems necessary to achieve its protection policy and to implement the management strategy(ies) selected. The policies established and strategies selected, will dictate how the individual protection techniques selected are designed.

RANGE OF POLICIES AND STRATEGIES OF SELECTED GROUNDWATER PROGRAMS*

TABLE 4.

| | POLICIES | STRATEGIES |
|---|---|---|
| Arizona** | Differential Protection | Contaminant and Source Management. Sources must obtain discharge plan approval. |
| Connecticut | Differential Protection | Aquifer Classification (4 classes - use quality, land use and flow system) |
| Florida | Limited Degradation (protecting present and future most beneficial uses) | Aquifer Classification (4 classes- quality, flow system and use). |
| Minnesota | Between Non-degradation and Limited Degradation | A mixture of Contaminant and Source Management and Uniform Management. Will rely on coordination of existing operating programs. |
| Maryland | Differential Protection | Aquifer Classification (3 classes- yield and quality). |
| Montana | Between Limited and Non-Degradation (highest quality must be maintained unless need for change is affirmatively demonstrated to Water Quality Board) | Aquifer Classification (4 classes- quality, and use). |
| New Jersey | Between Non-Degradation and Limited Degradation | Aquifer classification (4 classes- quality and sensitive environmental systems). No underground injection allowed. Considering Recharge Zone Protections for the Pinelands. |
| New Mexico | Limited Degradation (allows degradation up to standards) | Mixture of Uniform Management and Aquifer Classification. Water quality standards apply to aquifers with less, than 10,000 TDS mg/l. |
| New York | Differential Protection | Aquifer Classification (3 classes) Parts of Long Island have adopted Recharge Zone Protection. |
| North Carolina | Differential Protection | Aquifer Classification (5 classes- both quality and depth). |
| Oregon | Differential Protection (no underground injection) | Mixed Contaminant and Source Management and Aquifer Classification. Focus efforts in areas where waste disposal practices and regulated activities have greatest potential for degradation. |
| Virginia | Limited Degradation (general policy to protect natural quality, but in some cases allows degradation beyond standard) | Mixed Aquifer Classification (4 classes- water quality) and Uniform Management (a number of groundwater quality standards apply statewide). |
| Wisconsin* | Non-Degradation | Uniform Management (approach would be to extend protection standards uniformly statewide). |
| Wyoming | Differential Protection | Aquifer Classification (8 classes- complex system for multiple uses). |

*/ The information in this Table is based upon ELI's files.

** Proposed programs, still undergoing changes.

Table A - Summary Table - Existing Federal Ground-Water Protection Programs

| | Scope - what Resource is Protected? | Differential Protection of Groundwater? | Duration of Control? | Regulatory Mechanism? | Waiver/variance Provision? | Monitoring and Remedial Action Approach |
|---|---|---|---|---|---|---|
| SDWA-UIC Parts 144-146 | Aquifers which could supply PWS with <10,000 mg/lTDS | Yes-Class V wells can degrade up to MCLs vs. no degradation for class I, II, III | During well operation, but presumably forever | Classes I to III-Design Standards Class V-non endangerment of USDWs | Yes-exempted aquifers can be designated | Specified in Permits |
| RCRA-264 | Uppermost aquifers | No increase in hazardous waste constituents or no violation of MCLs | 30 years post closure for disposal facilities | Design and performance standards | Yes-risk based alternate concentration limits on case-by-case basis | Monitoring and remedial action required |
| RCRA-257 | Current USDWS and GW with <10,000 TDS | Maintain drinking water standards | Unspecified - regulatory scheme implies forever | Design and performance standards | NONE | NONE |
| UMTRCA | Uppermost aquifers | Yes-no increase in Mo or U. Radium 226/228 up to 5pCi, Gross Alpha up to 15pCi | Design objective of 200-1000 years | Design standards - liners required | NONE | Case-by-case decisions |
| TSCA-PCB Part 761 | Groundwater (undefined) | No-no release of PCBs to any groundwater | 20-years post closure | Design and location standards | NONE | Monitoring Required |
| CWA-Constr. Grants Part 35 | Uppermost aquifers with 3 classes based on current and potential uses | Yes-protection to levels set by three classes | Unspecified | Best practicable waste treatment technology | NONE | Case-by-case monitoring to demonstrate compliance |
| FIFRA - Pesticide Policy | Groundwater | No-max. advisable level based on no effect on 10kg child drinking 1 liter/day | As long as the pesticide is registered | Controls on or prohibition of use of specific pesticides | NONE | Monitoring can be required of registrants if GW contamination is concern |
| High level Rad. Wastes | Groundwater (undefined) | Yes-Some aquifers become part of disposal site | 10,000 years | Design and performance standards | NONE | NONE |
| CERCLA-NCP | Which could supply PWS or use by more than one person using scoring system | Yes-Decisions on a case-by-case basis | Unspecified | Case-by-case decisions | Case-by-case decisions | Case-by-case decisions |

NOTE: This is an abbreviated summary of Attachment II.
It is not intended to describe programs fully or to provide detail on regulatory requirements.

June 16, 1986

Board Meeting

The Board met at their conference room at 1260 Greenbrier Street, Charleston, W. Va. at 9:00 A. M.

See notice as filed in the office of the Secretary of State and attached attendee list.

Note: All Board members (4) and staff were present.

Attendees
Board Meeting

June 16, 198

| Name | Organization |
| --- | --- |
| Kristin Treadway | Atty Gen. Off. |
| Patricia Morrison | " |
| Cecelia Jarrell | Attorney General's Office |
| Karen Watson | " |
| Frank Pelurie | Water Resources Div. |
| Keith Miller | WVMA (Monsanto) |
| ARLEN BISHOP | WVMA (DuPONT) |
| Ann Bradley | Robinson + McElwee |
| Richard Herd | Allegheny Power Service C. |
| Michael Jarvis | W. Va. Dept. of Energy |
| Roger T. Hall | W. Va. Dept. of Energy |
| CHET FLEMING | W. Va. DEPT. OF HEALTH |
| Ed Bumgarner | W.V. Soil Conservation Comm |
| JACK HARRISON | WV PETROLEUM COUNCIL |
| Fred VanKirk | W.Va DEP |

STATE OF WEST VIRGINIA
STATE WATER RESOURCES BOARD
1206 Greenbrier Street
Charleston, West Virginia 25311
(304) 348-4002





June 9, 1986

The Honorable Ken Hechler
Secretary of State
State Capitol Bldg. # 1 Room 157-K
Charleston, W. Va. 25305

Re: Notice of Meeting

Dear Mr. Secretary:

Pursuant to Chapter 6, Article 9A of the Code of West Virginia and in accordance with rules and regulations promulgated and filed by this Board in your office, notice is hereby given that the State Water Resources Board will be meeting on June 16, 1986 at 10:00 A. M. in conference room located at 1260 Greenbrier Street, Charleston, W. Va. for the purpose of:

1. Discussion on terms of reference for establishing a groundwater protection technical committee;

2. Board executive session on budget and personnel matters; and

3. Other business which may properly come before the Board.

The meeting is open to the public pursuant to above Code. Seating capacity of the conference room is 20.

Very truly yours,

Frances E. Hunter

Frances E. Hunter
Executive Secretary

c Capitol News Media

ST VIRGINIA WATER RESOURCES BOARD

JUNE 16, 1986

GROUNDWATER
Advisory Committee Formation

of today's meeting is to bring together a diverse
capable of advising both the regulatory and
encies involved in groundwater protection.
comments, suggestions, expertise and experience
the regulaton of groundwaters in West Virginia.
a portion of your time and effort in order to
cassions and report or express the various
field or point of view.

is being held to generate discussion; feel free
time. Today it is hoped that we might establish
erence, (2) membership or suggested membership of
ttee, (3) timing and milestone dates and (4) a
mittee.

ENCE
rmulate state-wide regulations certain factors
onsidered. Many questions must be asked and
oad issues are most apparent:

icy
B. Strategy
lementation of strategy and policy
gulation)

eed to follow the order in which they are listed.
ever, the WRB would like more information on
(B) and implementation techniques (C) before an
is developed. Some guidance on policy may
State statutes. Regulation (C) would always come

ADVISORY COMMITTEE

our input on size and makeup of a thorough (well
the interests) yet manageable committee.

representat