

# CHAPTER FIVE THE STATE ROLE IN WATER QUALITY MANAGEMENT

## OVERVIEW

### Relation of State and Federal Laws to State Water Quality Management

The major law dealing with water quality management at the State level is the New Mexico Water Quality Act.

Because so many activities may affect water quality, other State laws besides the Water Quality Act are involved in water quality protection. Among these laws are the Utility Operators Certification Act, the Wastewater Facility Construction Loan Act, the Oil and Gas Act, the Environmental Improvement Act, the Solid Waste Act, the Hazardous Waste Act, the Mining Act, the Voluntary Remediation Act and several laws giving authority to local governments.

New Mexico has received delegated authority from the United States Environmental Protection Agency (EPA) to implement, at the State level:

- the wastewater revolving loan program of the federal Clean Water Act (CWA);
- the underground injection control and public water supply programs of the federal Safe Drinking Water Act (SDWA);
- the hazardous waste management and the State underground storage tank programs of the federal Resource Conservation and Recovery Act (RCRA);
- the State underground storage tank program of RCRA; and
- the State solid waste management program.

While New Mexico assists EPA with the administration of the National Pollutant Discharge Elimination System (NPDES) permit program of the CWA, EPA is responsible for issuance and enforcement of NPDES permits.

Both the State and the federal government play significant roles in water quality management in New Mexico. This chapter describes the various programs and mechanisms for water quality management in New Mexico with emphasis on the State role.

Ground water quality management has both State and federal aspects. New Mexico's ground water protection program was well-established before most of the federal legislation and regulations addressing ground water quality were adopted. State regulations controlling the disposal of oil field brines necessary to protect ground water quality have been in effect since 1969. A comprehensive ground water quality program applicable to most other types of discharges was in effect by 1977 in the form of regulations adopted by the New Mexico Water Quality Control Commission (WQCC). There are also various other State laws and regulations affecting ground water quality management.

The challenge to New Mexico has been to incorporate in its programs beneficial aspects of federal programs without

disruption of State programs already in place. The State has sought and obtained primary enforcement authority over the underground injection control program established by the SDWA and the hazardous and solid waste management programs established by RCRA. The State receives limited funding from the EPA under four laws, namely, SDWA, RCRA, CWA, and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund.

Surface water quality management in New Mexico also has State and federal aspects. The State establishes standards for intrastate and interstate waterbodies, assesses the quality of surface waters, adopts regulations, and develops programs and takes actions to protect and maintain surface water quality. The State also coordinates with EPA in implementing the CWA, the nation's primary legislation for controlling surface water quality. Under this act, Congress provides partial funding for State water quality planning and management activities, for State contractual assistance in the administration of the NPDES permit program, and for loans for planning, design, and construction of wastewater treatment facilities by communities. EPA administers the NPDES permit program and performs administrative responsibilities pursuant to the CWA.

### ■■■■ RESPONSIBILITIES OF THE WATER QUALITY CONTROL COMMISSION ■■■■

The basic authority for water quality management in New Mexico is provided through the New Mexico Water Quality Act (Sections 74-6-1 et seq., NMSA 1978). This law establishes the WQCC and specifies its duties and powers. These include adoption of a comprehensive water quality management program, the development of a continuing planning process, the

administration of loans and grants from the federal government, the adoption of water quality standards, and the adoption of regulations 'to prevent or abate water pollution in the state or in any specific geographic area or watershed of the state...or for any class of waters.' Under this act, water is defined as 'all water, including water situated wholly or partly within or bordering upon the state,

whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water.' The WQCC is the State water pollution control agency for all purposes of the federal CWA and may take all necessary actions to secure the benefits of the Act. The composition of the WQCC is shown below in Figure 11.

**Figure 11.      Composition of the New Mexico Water Quality Control Commission.**

Under the authority of the Water Quality Act, the WQCC had adopted the basic framework for water quality management in New Mexico. Major components of this framework include the continuing planning process, the State water quality management plan, ground and surface water quality standards, ground water protection regulations, underground injection control regulations, regulations for discharge to surface waters, a regulation on disposal of refuse, a spill cleanup regulation, ground water pollution abatement regulations, utility operator certification, and wastewater facility construction loan regulations. In addition, the WQCC approved a nonpoint source management program in 1989 which was updated and submitted to the EPA in July 1994.

These major components are reviewed briefly below. Where more detailed discussion of certain components is found elsewhere, cross-references are made to the appropriate sections. As the WQCC has no technical staff of its own, responsibilities for water quality management activities are delegated to constituent agencies, generally the New Mexico Environment Department (NMED) or the Oil Conservation Division (OCD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD).

### **Continuing Planning Process**

The continuing planning process required by the CWA provides a framework for water pollution control activities in the State by describing program components and interrelationships. The present continuing planning process was adopted by the WQCC in 1998 (1).

### **Water Quality Management Plan**

The State water quality management plan helps set direction for further study of water pollution, options to be considered in development of water pollution control mechanisms, and most importantly, strategies to be implemented by State, local, and federal agencies to maintain and, as necessary, improve water quality in New Mexico. The

WQCC adopted the plan in November 1978 and May 1979 (4) and has delegated responsibility for development of most elements of the plan to NMED. The plan has been updated many times.

### **Ground Water Quality Standards**

Water quality standards for 47 contaminants or classes of contaminants are included in the ground water protection regulations (2, §3103), discussed below.

### **Surface Water Quality Standards**

Under the Water Quality Act, the WQCC is required to promulgate surface water quality standards. These standards include: (1) general standards applicable at all times to all surface waters of the State, unless otherwise specified in the site-specific criteria of Part 2; and (2) site-specific standards for each of 66 segments set out in Subpart II of the standards, including their designated uses, for which the water quality is to be maintained, and numeric and narrative standards to sustain the uses; and (3) use-specific numeric water quality standards set out in Subpart III, § 3101 for existing, attainable and designated uses. The standards are subject to triennial review and appropriate revision pursuant to § 303(c) of the federal CWA. Amendments may be proposed at any time by NMED or others, as the Water Quality Act specifies that any person may propose amendments to the standards (§ 74-6-6. B). Proposed amendments are presented at public hearings before consideration and adoption by the WQCC.

### **Underground Injection Control Regulations**

Underground injection wells, other than those associated with oil and gas production, are regulated under the general ground water protection requirements of Subpart III of the WQCC regulations and under the underground injection control regulations, Subpart V of the WQCC regulations (2). All types of underground injection wells except those associated with oil and gas production are subject to Subpart III and

must meet all applicable provisions of these regulations. The Subpart V underground injection control regulations impose technical requirements on injection wells used for effluent disposal and *in situ* mineral extraction.

### **Ground Water Protection Regulations**

Both Subpart III and Subpart V of the WQCC regulations (2) are designed to protect all ground water with total dissolved solids concentrations of 10,000 mg/L or less for present and potential use as domestic and agricultural water supply.

### **Regulations for Discharge to Surface Waters**

State regulations for this purpose, §§ 2100 to 2102 of the WQCC regulations (2), are administered by NMED and OCD. As the WQCC has, to date, determined that the federal NPDES permit program should be the primary mechanism for controlling point source discharges to surface water in the State, the WQCC has incorporated a mechanism into the regulations to ensure NPDES permittees normally are not simultaneously subject to federal and State regulations. The WQCC recognizes that NMED has the responsibility to coordinate, under contract, with EPA in administering the NPDES permit program.

### **Regulation in Disposal of Refuse**

Section 2201 of the WQCC regulations (2) prohibits the disposal of refuse in a natural watercourse or in a location or manner where there is a reasonable probability that refuse will be moved into a natural water course. 'Refuse' is broadly defined (2, § 1101.00) and includes, among other things, all substances from the preparation, cooking, and consumption of food and from the handling, storage, and sale of food products, junked parts of automobiles and other machinery, paper and paper products, oil, ashes, tailings, and all unwholesome materials. NMED has used this regulation as a legal basis to stop discharge of sludge from domestic

wastewater treatment plants into watercourses.

### **Cleanup Regulation**

Section 1203 of the WQCC regulations is a major tool for controlling ground and surface water pollution. First, this regulation requires most leaks, spills, and other unregulated discharges that enter, or have the potential to enter surface or ground water, to be reported to NMED without delay. The only exceptions are those discharges where laws, rules, regulations, or orders require notification to OCD. WQCC regulation § 1203.A requires that, "the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge," of a water contaminant. This non-specific regulation, adopted in 1974 and modified in 1987, has been used to compel actions ranging from simple soil removal to long-term ground water remediation.

However, most longer term cleanups are now handled under Subpart IV of the WQCC Regulations, also known as the Abatement Regulations. An abatement plan includes Stage 1 (investigation) and Stage 2 (alternative selection, design and implementation) components. Abatement standards exist for the vadose zone, ground water and surface water. Subpart IV also includes provisions for public notice, public meetings in cases where there is significant public interest, technical infeasibility demonstrations, risk-based variances allowing cleanup to "alternative abatement standards", dispute resolution, and appeals.

### **Utility Operator Certification Regulations**

20 NMAC 7.4 regulations help support compliance with NPDES permit limitations and State regulations in two

ways: (1) by requiring utility operators to demonstrate knowledge of wastewater treatment through testing and to further their knowledge through continuing training; and, (2) by requiring that wastewater utilities be adequately staffed with certified operators. The regulations are administered and enforced by NMED.

### **Wastewater Facility Construction Loan Regulations**

Regulations pursuant to the Wastewater Facility Construction Loan Act (Part 5, 20 NMAC 7.5) were amended by the WQCC in 1993. These regulations are used by NMED in the administration of the State revolving loan program. Part 5 defines eligibility for local authorities to borrow State and federal monies from a revolving loan fund for wastewater facility construction. The regulations also address eligible and ineligible construction items, the priority system and priority lists (project ranking), application procedures, and administration of the loan program and fund. The last topic includes criteria for zero and three percent interest rates which are available under certain conditions. The FY 1998 interest rate is four percent.

### **Nonpoint Source Pollution Management Program**

The WQCC has approved a nonpoint source pollution management program (4) mandated by the United States Congress in the 1987 Amendments to the CWA. This program was updated in July 1994 and submitted to EPA. The 1998 update of the program is in progress.

### **Clean Water Action Plan**

In order to help meet the goals of the Clean Water Act, states were directed, in

1998, through the Clean Water Action Plan (CWAP) to identify and prioritize watersheds with water quality problems. New Mexico developed a cooperative approach to develop the Unified Watershed Assessment (UWA) that identified the following categories of watersheds (utilizing the USGS 8-digit system of watershed delineation): Category I.- Watersheds in Need of Restoration; Category II.- Watersheds Meeting Goals; Category III.- Watersheds with Pristine/Sensitive Aquatic System Conditions; and Category IV.- Watersheds with Insufficient Data to make an Assessment. Category 1 watersheds fall within several of New Mexico's basins and will have additional monies through the CWAP process directed to nonpoint source pollution projects within these watersheds in the near future. These funds will focus on watersheds prioritized within the Category 1 watersheds.

### **Other Responsibilities**

Besides responsibilities for components of the basic framework reviewed above, the New Mexico Water Quality Act has assigned or the WQCC has delegated other water quality management responsibilities to NMED or OCD. These responsibilities include the following:

- State certification of licenses to construct and operate power dam facilities issued by the Federal Energy Regulatory Commission;
- investigations of existing water quality;
- lead agency for all nonpoint source pollution control activities;
- determination of the extent and causes of water pollution; and
- State certification of permits issued under CWA §§404 (Dredge-and-Fill permits) and 402 (NPDES permits).

## **OTHER PROGRAMS RELEVANT TO WATER POLLUTION CONTROL**

Not all programs and mechanisms for water pollution control in New Mexico fall under the jurisdiction of the WQCC. This applies especially to ground water quality management. Among the major

responsibilities are those of: (1) OCD for protection of fresh water, and management of non-domestic and non-hazardous solid waste from oil and natural gas production facilities under the

New Mexico Oil and Gas Act, 2) EMNRD's Mining and Minerals Division (MMD) for reclamation of mining sites to mitigate impacts associated with hard rock mining under the New Mexico

Mining Act, and; 3) those of the New Mexico Environmental Improvement Board for hazardous waste management, underground storage tanks, liquid waste disposal, solid waste management, and

emergency response under several State laws. In addition, NMED coordinates with the federal government in the implementation of Superfund. The

Office of the State Engineer regulates ground water withdrawals in order to prevent saline water encroachment into fresh water.

## == CHANGES IN THE WATER QUALITY MANAGEMENT FRAMEWORK, 1996-1998 ==

### **Surface Water Quality Standards Revisions**

NMED distributed a public discussion draft of proposed changes to the New Mexico water quality standards to approximately 220 interested individuals and agencies on October 6, 1997. Meetings were held with all requesting individuals and groups. Public meetings were held in Las Cruces, Roswell and Santa Fe in December 1997 to address these proposals and evaluate them. A total of over 40 individuals attended these informational meetings and offered helpful criticisms. There was found to be sufficient interest to warrant a second updated public discussion draft and a second round of public informational meetings. This second public draft was distributed on April 14, 1998. Public meetings were held in Silver City, Farmington and Santa Fe in May 1998 to address these proposals and evaluate them.

The final Department proposals were distributed to interested parties on June 8, 1998, and a hearing date was requested from the New Mexico Water Quality Control Commission. Proposals from all parties were received by the Commission secretary on or before July 22, 1998. All parties intending to present technical testimony at the hearing filed notices of intent to present technical testimony with the Commission secretary on or before August 21, 1998. The hearing began on September 21 and continued for nine days. There were lively discussions concerning the NMED's proposed changes to the antidegradation policy, wildlife habitat standards, existing exemptions for irrigation and flood control facilities and various definitions.

### **Voluntary Remediation Act**

The Voluntary Remediation Act was passed during the 1995 legislative session

and is designed as an alternative to traditional regulatory cleanup programs. The purpose of the Act is to encourage cleanup and redevelopment of underutilized contaminated sites, or Brownfields properties. Under this program the entire process is voluntary, lender liability is removed, a certificate of completion is offered to owners and operators who cleanup their sites, and a covenant not to sue is offered to prospective purchasers of contaminated properties cleaned up under this program.

This new program will benefit: landowners who want to sell or redevelop properties that are contaminated; financial institutions that have historically been leery of lending money on contaminated properties; local governments and communities through revitalization of neighborhoods, improvements to infrastructure and increases in the value of land and thus the local tax base; and state government because enforcement staff will be free to focus on higher priority sites where there is not a cooperative responsible party.

Incentives for participation in the Voluntary Remediation program include: a streamlined regulatory process with clear risk-based cleanup goals; a defined end-point; the certificate of completion for responsible parties at the end of the cleanup; and the covenant not to sue for prospective purchasers. NMED plans to expand these incentives to offer other financial incentives during the 2000 state legislative session.

### **Public Water Supply Program Changes**

As a result of the Safe Drinking Water Act (SDWA) Amendments of 1996 (PL 104-182) there are many additions to the act which will positively affect the ability of small systems to build proper infrastructure, receive training and

improve their financial, management and technical abilities to sustain and operate the new or rehabilitated water systems. The relevant Amendments include, among other things, new prevention approaches, improved consumer information, changes to improve the regulatory program, and funding for States and local water systems.

### **Changes in the Underground Storage Tank Program**

The Ground Water Protection Act provides a State Corrective Action Fund for NMED to use in taking corrective action at sites contaminated by the contents of leaking underground storage tanks and to allow for the reimbursement of tank owners and operators for the costs of corrective action. In 1995 the Act was amended to: 1) limit reimbursement for corrective action done by geotechnical companies affiliated with petroleum tank owners and operators ("affiliates"), 2) require qualification of firms conducting corrective action in order for the work to be eligible for reimbursement, and 3) require that all corrective action be competitively bid in order to qualify for reimbursement. In 1996, the Petroleum Products Loading Fee Act was modified again, this time to triple the amount of money going into the Fund from \$40 to \$120 per load and to set out conditions for reducing or increasing the loading fee based on the unobligated balance in the Fund.

### **Update on the New Mexico Mining Act**

In its 1993 regular session, the New Mexico Legislature passed and the Governor signed into law the New Mexico Mining Act, which became effective June 18, 1993. The Mining Act requires new and existing mining and exploration operations to have mining

permits and closeout plans obtained from MMD. These new permits must be closely coordinated with other environmental permits such as those issued by NMED, none of which are superseded by the new reclamation and closeout rules. This new Act applies to hard rock mining operations and covers the extraction of such minerals as copper, molybdenum, precious metals and uranium. Other minerals such as coal, potash, sand and gravel are exempted, as are operations regulated under Subtitle C of RCRA.

The passage of this Act was the result of long negotiations and meaningful compromises among various parties, including the mining industry, environmental interests and State lawmakers. The Mining Commission adopted regulations to implement the Act on July 12, 1994 after a sixteen day public hearing.

Although many aspects of hardrock mining were already covered by environmental laws and regulations, this new statute was needed to fill in the gap with reclamation coverage. Unlike coal

mines, for which complete reclamation has been required for years, only limited reclamation had been required of hardrock mines prior to the passage of the Act.

The Mining Act is unusual in assigning duties to several State agencies, thereby taking advantage of their substantial specialized expertise, and mandating the cooperation and coordination of those State agencies to avoid duplicative or conflicting requirements. In addition to MMD, State agencies involved in the permitting process are NMED, Game & Fish Department, State Historic Preservation Office, State Engineer's Office, State Land Office, and the Division of Forestry of EMNRD.

Permitting requirements differ according to the various categories of mines recognized by the State: new, existing, exploration, minimal impact, et cetera. For instance, requirements are more stringent for *new* rather than *existing* mines, and less stringent for small *minimal impact* rather than for the full-scale mines. All permits must be closely coordinated with other

established regulatory programs, which the new reclamation and closeout codes complement but do not supersede. Before MMD can issue a permit under the Act, all other State agencies cited above must be given an opportunity to comment, and there must be evidence that other applicable State and federal permits have been or will be obtained (for instance water or air quality permits issued by NMED or the EPA). Another major feature of the Mining Act is its requirement that the Secretary of NMED provide a determination that environmental standards are expected to be met before a new mine permit or a closeout plan for an existing mine can be approved by MMD.

In summary, the specialized expertise of many State agencies is necessary to the success of the New Mexico Mining Act in carrying out its stated purposes which "*include promoting responsible utilization and reclamation of lands affected by exploration, mining or the extraction of minerals that are vital to the welfare of New Mexico*" (5).



## **REFERENCES: THE STATE ROLE IN WATER QUALITY MANAGEMENT**

### **New Mexico Water Quality Control Commission**

- (1) 1987 State of New Mexico Continuing Planning Process. Santa Fe. 48 Pages.
- (2) 1996 New Mexico Water Quality Control Commission regulations as amended through November 15, 1996. Santa Fe. 83 pages.
- (3) 1995 Water Quality Standards for Interstate and Intrastate Streams in New Mexico. Santa Fe. 51 Pages.
- (4) 1979 New Mexico Statewide Water Quality Management Plan. Santa Fe. 107 Pages.
- (5) 1993 New Mexico Mining Act, 69-36-1 through 69-36-20 NMSA 1978. 17 pages.