

I. WATER QUALITY

A. Federal Clean Water Act

1. Overview

The Clean Water Act¹ (CWA) is an important federal environmental statute affecting agriculture. The law was originally enacted by Congress in 1972 and has been amended several times since. Its objective is to reduce or eliminate water pollution in the nation's rivers, streams, lakes, and coastal waters. A variety of mechanisms are employed by the CWA to control domestic, industrial, and agricultural pollution. Several types of agricultural activities and practices are regulated under the statute. Direct discharges from feedlots are an example. The U.S. Environmental Protection Agency (EPA) is charged with enforcing the CWA.

2. Water Quality Standards

The CWA requires each state to adopt water quality standards for most water bodies located within the state's borders. Rivers and streams are often divided into segments for this purpose. The water quality standards specify appropriate uses to be achieved and protected for each segment of water, such as public water supplies; protection and propagation of fish, shellfish, and wildlife; recreation in and on the water; agricultural uses such as irrigation or livestock watering; and navigation. Each state's water quality standards also include numerical or narrative criteria that are designed to protect these uses. The standards are then used to establish treatment controls and strategies to protect the water quality, and may include specific requirements placed in permits issued to point sources. However, there are no federal laws or regulations that require the control of nonpoint sources to achieve water quality standards. In addition, as an anti-degradation policy, water quality standards may also prohibit new waste discharges into waters of exceptionally high quality.

¹ 33 U.S.C. § 1251 *et seq.* (1994).

3. *NPDES Permits*

Discharges of waste from point sources into navigable waters are regulated through a permit system known as the National Pollutant Discharge Elimination System (NPDES). Permits are issued either by EPA or by the state under a program approved by EPA. It is illegal to discharge waste from point sources into navigable waters without a permit or in violation of the terms of the permit. The CWA defines a point source as the following:

The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigation.

Navigable waters are defined by the CWA as "waters of the United States." This phrase has been interpreted broadly by EPA regulations and the courts to include most rivers, streams, lakes, and wetlands. Navigable waters do not have to be accessible by boats to meet the definition.

NPDES permits contain effluent limitations specifying the amounts of pollutants which may also be discharged. The permits contain other terms and conditions as well. Operational practices may also be specified. Monitoring, record keeping, and reporting requirements are usually included. If EPA is issuing the permit, a state certification that the permit complies with the CWA and state laws is required. In some cases, a permit may prohibit all discharges into water.

The permit issuance process normally involves the submission of an application, agency review of the application for completeness, a tentative permit decision by the agency, time for public comment or a hearing, and the final permit decision.

Producer Note: Many animal feeding operations and aquatic feeding operations are considered point sources and therefore require permits. If a pollutant discharge into waters of the U.S. occurs and the operation does not have a required permit, an owner or operator may be exposed to serious penalties. Producers may contact state and federal authorities to determine if a permit is required for a particular operation. Generally, an NPDES permit application will request information concerning activities occurring at the facility, including a description of the nature of the business. In addition, the name, address, telephone number, and ownership status of the operation will be required, along with a list of all other environmental permits or construction approvals which have been received or for which application has been made, a topographical map, and whether the facility is located on tribal land.

Concentrated animal feeding operations (CAFOs) are required to obtain an NPDES permit. A facility is a CAFO if it has more than 300 animal units and discharges directly into navigable waters, or if the operation has more than 1,000 animal units. A feeding operation does not need a permit, however, if it only discharges as a result of a 25-year, 24-hour storm event. An animal unit is defined as 1.0 unit per animal for slaughter and feeder cattle, 1.4 units per animal for mature dairy cattle, 0.4 unit per animal for swine, 0.1 unit per animal for sheep, and 2.0 units per animal for horses.²

Generally, 1,000 animal units is the equivalent of 1,000 slaughter and feeder cattle, 700 mature dairy cattle, 2,500 swine which are over 55 pounds, 500 horses, 10,000 sheep or lambs, 55,000 turkeys, 100,000 laying hens or broilers with continuous overflow watering, 30,000 laying hens or broilers with a liquid manure system, or 5,000 ducks. In addition, 300 animal units is the equivalent of 300 slaughter or feeder cattle, 200 mature dairy cattle, 750 swine over 55 pounds, 150 horses, 3,000 sheep or lambs, 16,500 turkeys, 30,000 laying hens or broilers with overflow watering, 9,000 laying hens or broilers with a liquid manure system, or 1,500 ducks.

Concentrated aquatic feeding operations require an NPDES permit if they produce more than 9,090 harvest weight kilograms per year of cold water fish or 45,454 harvest weight kilograms per year of warm water fish. Discharges into aquaculture projects also require a permit. An aquaculture project is a "defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals."

4. Wetlands

Producer Note: When agricultural operators conduct dredging and filling activities which affect water sources, these activities may require a permit. Careful attention to these activities is required as the lack of a required permit may expose the operator to serious penalties.

A separate permit, known as the section 404 permit,³ is required by the CWA for discharges of dredge and fill materials into navigable waters. These permits are issued by the U.S. Army Corps of Engineers and are subject to review and approval by EPA and the state. The filling of wetlands and the construction of structures in streams, such as irrigation gates or docks, will often require a section 404 permit.

Although minor wetlands filling activities may be covered by a section 404 General or Nationwide Permit, substantial dredging or filling will usually require an individual permit.

² 40 C.F.R. § 122.23, app. B to pt. 122 (1996).

³ 33 U.S.C. § 1344 (1994).

Permits may be denied if the activity causes significant adverse effects on the water body or the surrounding environment and there are practical alternatives available.

There are 36 section 404 General or Nationwide Permits.⁴ In addition, a General Permit for prior converted cropland has been proposed. The following agricultural activities are allowed under the permits:

- Fish and wildlife harvesting, enhancement, and attraction devices and activities (permit #4);
- Wetland restoration activities (permit #27);
- Cranberry production activities (permit #34);
- Emergency watershed protection and rehabilitation (permit #37);
and
- Farm buildings (permit #40).

In addition, a number of permitted activities may relate to a farming operation, including maintenance, utility line backfill and bedding, bank stabilization, road crossing, return water from upland contained disposal areas, minor discharges, minor dredging, oil spill cleanup, headwaters and isolated waters discharges, temporary construction and access, and cleanup of hazardous and toxic waste. On December 13, 1996, the Army Corps of Engineers reissued the existing Nationwide Permits with some modifications and issued two new Nationwide Permits.⁵ The two new permits were for moist soil management for wildlife (permit #30) and maintenance of existing flood control facilities (permit #31). In addition, changes to headwaters and isolated waters discharges (permit #26) will cause an increase in review time for some activities and more clearly define the activities allowed under the permit.

Producer Note: All producers are encouraged to check with state and federal environmental officials to determine if a specific farming activity will be covered by a section 404 General or Nationwide Permit, or if the activity needs an individual permit. Should the activity be covered by a permit, a producer should obtain a copy of the permit for reference and guidance. Copies can be requested from the U.S. Army Corps of Engineers.

A permit may include either onsite or offsite mitigation requirements. Mitigation requirements include restoring altered wetlands and permanently protecting other wetlands from alteration.

⁴ 33 C.F.R. app. A to pt. 330 (1996).

⁵ 61 Fed. Reg. 65,874 (1996).

Many normal farming, ranching, and logging practices, such as plowing, seeding, cultivating, minor drainage, and harvesting, are exempt from permit requirements under section 404(f) of the CWA if the activities are already occurring and will be ongoing and continuous.⁶ However, a permit may still be required if major changes to the operation occur.

5. *Nonpoint Source Pollution*

Producer Note: Section 319 of the CWA was enacted in 1987 and guides the states in conducting nonpoint source assessments, developing nonpoint source management programs, and, as of 1990, beginning implementation of those programs. There are no federal regulatory requirements in section 319.

Nonpoint source pollution is generally caused by runoff or snowmelt from cropland, pastures, barnyards, and impervious surfaces such as roads, parking lots, and roofs. The runoff may carry sediment, pesticides, herbicides, fertilizers, and other chemicals into adjacent waters, causing pollution. The CWA recognizes that cleaning up the nation's waters requires control of nonpoint as well as point source pollution, and regulation of nonpoint source pollution involves cooperative programs with the states.

The plan will generally provide for the development of best management practices (BMPs) as a means of controlling nonpoint sources of pollution. Cost sharing programs to help farmers and ranchers implement BMPs on their operations are also authorized. To assist states implementing their approved programs, states have received a total of about \$470 million in the years 1990-1996 to implement programs, including cost share for demonstration projects, technical assistance, education, training, and enforcement.

6. *Oil Spill Liability*

The CWA imposes strict liability on the operators of facilities that spill oil or other hazardous wastes into navigable waters. This would include spills from petroleum storage tanks located on farms. The CWA requires that the operator promptly notify EPA of any spill. A failure to give EPA notice of the spill is a violation of the statute.

7. *Enforcement and Judicial Review*

Persons who violate the regulatory requirements of the CWA may face substantial penalties. These include both civil and criminal fines. Incarceration is possible for severe violations. EPA or the state can enjoin or stop producers' activities in order to force compliance with the statute. The CWA allows citizens to file suits to enforce CWA requirements in certain circumstances. However, if a producer disagrees with the way CWA requirements are applied to

⁶ 33 C.F.R. § 323.4 (1996).

an operation, opportunities for both administrative and judicial review of EPA and state decisions are available.

Producer Note: In order for producers to maintain compliance with water quality legislation, they must be aware of state water quality standards, NPDES permit requirements, state and local nonpoint source pollution programs, wetlands permits, oil spill liability, and whether there are waters requiring special protection in their area. The states take active roles in ensuring that producers comply with these requirements.

B. State Water Quality Laws and Regulations

Most states have enacted clean water legislation. Many of these state statutes contain similar requirements to the CWA, but some impose more restrictive requirements than the federal law. The CWA authorizes EPA to delegate the NPDES permit program to individual states. However, where states have this responsibility, EPA requires enactment of statutes closely tracking the CWA. In these states, CWA enforcement requirements often come through state statutes and procedures, and states can also pass their own state water quality legislation. State administrative agencies promulgate regulations to implement the state laws. These regulations usually contain provisions similar to those found in the parallel federal regulations, but there may be significant differences.

Caution: Because environmental laws and regulations change frequently, all producers must stay in contact with both state and federal officials in order to remain aware of and in compliance with changes in the law.

1. Nebraska Environmental Protection Act

Producer Note: The Environmental Protection Act is the primary water quality legislation in Nebraska. Air quality and solid wastes are also regulated under the Act. The Act is administered by the Nebraska Department of Environmental Quality (DEQ) under the general supervision of the Environmental Quality Council (Council).

The Environmental Protection Act⁷ (Act) gives DEQ authority to regulate the quality of surface waters in Nebraska. The Act authorizes DEQ to develop comprehensive programs for the prevention, control, and abatement of new and existing sources of water pollution. DEQ establishes effluent guidelines and standards under the Act that, together with water quality standards, are used to set waste discharge permit requirements. It promulgates requirements and technical standards for the design, construction, and operation of waste disposal systems.

⁷ NEB. REV. STAT. § 81-1501 *et seq.* (1994 & Supp. 1996).

Producer Note: As required by the Environmental Protection Act, the Council has promulgated water quality standards for all surface waters in the state. The standards first set forth the use to be made of each river, stream, and lake in the state, including recreation, irrigation, or drinking water supply. The standards then describe for each type of pollutant the amount of waste that can be discharged into a river, stream, or lake without reducing the water quality below the minimum necessary for its intended use. These standards are used to set discharge permit requirements.

2. *Nebraska NPDES Program*

Producer Note: EPA has delegated the NPDES program in Nebraska to DEQ. Consequently, DEQ, rather than EPA, has primary responsibility for issuing permits for point source discharges and for enforcing related sections of the CWA. However, DEQ is required to administer the program in accordance with all federal statutes, regulations, and standards.

One of DEQ's most important duties under the Act is the issuance of permits for waste discharges into the state's surface waters. It may deny or revoke permits and issue orders prohibiting discharges when it determines that a producer is not in compliance with the standards established under the Act. The principal permit program administered by DEQ is the NPDES program.

3. *Concentrated Animal Feeding Operations*

Producer Note: An operation may be required to obtain permits in addition to the NPDES permit. In some cases, construction and operation permits may be required even when an NPDES permit is not required. For example, concentrated animal feeding operations are often required to obtain multiple permits.

A new feeding operation must generally obtain a construction permit if it requires waste treatment facilities such as holding ponds, liquid manure storage pits, tanks, or lagoons. The permit applicant is required to submit plans and specifications for the facility to obtain the permit. The plans and specifications must meet both state technical standards and facility location requirements. The facilities must be constructed in accordance with the plans and specifications and certified as such to DEQ.

In addition, a livestock feeding facility must obtain an operation permit before it begins feeding animals. The permit will contain operation requirements, including:

- Conditions for operation;

- Maintenance requirements; and
- Monitoring, inspection, and reporting requirements.

Producer Note: An NPDES permit will be required for livestock feeding operations in addition to construction and operation permits if the operation will discharge wastes into navigable waters, the operation will handle the minimum number of animal units specified by EPA regulations, or the operation will handle the minimum number of animal units set forth in the state regulations.

4. Enforcement of the Environmental Protection Act

Discharging wastes into surface waters, unless authorized by an NPDES or other permit, is a violation of the Act. Persons who violate the Act are subject to both civil and criminal penalties. Civil penalties include fines of no more than \$10,000 per day per violation, and each day of a continuing violation is a separate offense. In addition, liability also exists for the costs of restocking fish or replacing wildlife killed as a result of the violation.

Serious violations of the Act may be a felony, with less serious violations being misdemeanors. Convictions can result in jail sentences and fines, and DEQ may also seek an injunction from a court. The Attorney General or a county attorney represents DEQ in any litigation.

The Act also declares the discharge of wastes that reduce water quality below the standards set by the Council to be a public nuisance. In general, a nuisance is any activity or use of property that causes annoyance, harm, inconvenience, or damage to another. A nuisance is public when it violates public rights or causes an injury to the public at large instead of only nearby residents and landowners. State law gives parties injured by a public or private nuisance the right to sue the person causing or allowing the nuisance for damages (see discussion of nuisance laws on page NE-46).

However, the Act contains a special provision that declares that a livestock operation shall not be considered a public nuisance if reasonable techniques are employed to keep dust, noise, insects, and odor at a minimum, if the operation is in compliance with the Council's rules and local zoning regulations, and if the party alleging a nuisance took possession of his or her land after the livestock operation was permitted or, if no permit was required, after the livestock operation started business.

Producer Note: An administrative process is available to contest DEQ actions, including issuance or denial of permits, issuance of abatement orders, and assessment of civil penalties. Administrative procedures provide for a hearing before the DEQ Director or a designated hearing officer, and decisions of the Director may be appealed to the courts. Requests for hearings must be filed within 30 days of the issuance of a DEQ order. All appeals must be filed within 30 days after the Director's decision.

5. *Nebraska Nonpoint Source Pollution Control*

Producer Note: Nebraska has enacted a statute with the objective of reducing soil erosion, sediment deposition, and related water pollution caused by wind and by water runoff. The Act is administered by the Nebraska Natural Resources Commission (Commission) together with the Natural Resources Districts (Districts) of the state, and applies to both agricultural production and to nonagricultural land disturbing activities.

The Erosion and Sediment Control Act⁸ requires the Commission to develop a comprehensive erosion and sediment control program, which includes soil loss limits for the different soil types within the state. The Districts are authorized to investigate complaints of excessive soil erosion, and may issue administrative orders directing landowners and farm operators to bring their land into compliance with applicable soil loss limits. Districts may also petition the courts for orders directing immediate compliance with the administrative orders. Failure to comply with a court order can result in the landowner or operator being found in contempt of court and punished accordingly.

However, a farm owner or operator is considered to be in compliance with the Act if operating in strict compliance with a farm unit conservation plan approved by a District and if the operation is in compliance with established soil loss limits. The owner or operator is not required to install permanent soil and water conservation facilities listed in the farm unit conservation plan unless 90 percent cost sharing assistance is available. Some cost sharing assistance is available from the Nebraska Soil and Water Conservation Fund.

6. *Best Management Practices*

Nebraska has incorporated best management practices (BMPs) into aspects of its water quality program. However, with regard to livestock operations specifically, the DEQ has adopted regulations which reflect best management practices of livestock waste control facilities.⁹

⁸ NEB. REV. STAT. § 2-4601 *et seq.* (1991 and Supp. 1996).

⁹ NEB. ADMIN. R. & REGS. tit. 130, ch. 12 (1992).

The BMPs require livestock waste control facilities to be operated and maintained so as to prevent water pollution and generally protect the environment of the state.

Producer Note: Often the specifics of environmental laws are found in agency regulations. In addition, regulations are likely to be amended frequently. As a result, a producer must keep in contact with offices administering specific programs in order to keep up with all changes which may occur in a particular program.

¹⁰ 42 U.S.C. § 300g-1 *et seq.* (1996).

¹¹ Safe Drinking Water Act Amendments of 1996, P.L. 104-182.