

Chapter Two: Point Sources and NPDES Permits

I. Introduction

Although point sources of water pollution on BLM lands cause fewer problems than nonpoint sources, the National Pollutant Discharge Elimination System (NPDES) permit program applies to several activities on Federal lands. These include aspects of the silvicultural industries, mining, and oil and gas production.¹ Therefore, it is worth exploring the point source water pollution provision of the CWA and the numerical limitations placed on point sources through the discharge permit program.

II. BLM Point Sources

Chapter One discussed regulatory and judicial definitions of point sources. Silviculture and mining are point sources of particular relevance to the BLM. EPA regulations designate certain silvicultural activities as point sources and subject to the NPDES program. These include discharges from a discernible, confined, and discrete conveyance relating to rock crushing, gravel washing, log sorting, and log storage facilities.² The regulations, however, specifically exclude nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, and road construction or maintenance from which there is natural runoff.³

The EPA has established effluent limitation regulations for many kinds of mining operations including mining for coal, iron, aluminum, uranium, mercury, titanium, tungsten,

¹ Glicksman, Robert. Pollution on the Federal Lands II: Water Pollution Law. 12 UCLA J. Envtl. L. and Pol'y 61. 1993.

² 40 C.F.R. § 122.27(b)(1).

³ *Id.*

nickel, vanadium, antimony, copper, lead, zinc, gold, silver, molybdenum, and platinum ores.⁴ In addition, case law has established that discarded overburden, leaching processes, and placer mining can all constitute point sources.⁵ The mining and oil and gas industries have been largely unsuccessful in claiming many of their activities are nonpoint sources and, therefore, not subject to the NPDES program. However, in the 1987 amendments to the CWA, Congress explicitly excluded storm water runoff from the definition of a point source. Runoff from mining operations or oil and gas exploration, production, or treatment operations is exempt from the NPDES permit program if that runoff is composed entirely of flows from conveyances or conveyance systems used for collecting and transporting precipitation runoff.⁶ To qualify for the exemption, however, the runoff must not be contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of operations.⁷

III. State and Federal Roles

The EPA is responsible for the NPDES permit program, but pursuant to § 402(b) of the CWA, the EPA may authorize a state to administer NPDES permits within the state. In order to be granted permitting authority, the state must have an EPA-approved description of the program

⁴ 40 C.F.R. §§ 434, 440.

⁵ See *Sierra Club v. Abston Construction Company*, 620 F.2d 41 (5th Cir. 1980) (A point source of pollution may be present where miners design spoil piles from discarded overburden such that, during periods of precipitation, erosion of the spoil pile results in discharges into navigable bodies of water, even if the miners have done nothing beyond the mere collection of rock and other materials); *United States v. Earth Science Inc.*, 599 F.2d 368 (10th Cir. 1979) (pollution originating from leaching operations constitutes a point source); and *Rybackek v. EPA*, 904 F.2d 1276 (9th Cir. 1990) (placer mining is subject to the NPDES permit program because material is “added” to the water).

⁶ 33 U.S.C. § 1342(1)(2).

⁷ *Id.*

it plans to establish.⁸ In states not authorized to administer the NPDES program, permits are issued by EPA regional offices.

State-issued permits are sometimes referred to as State Pollutant Discharge Elimination System (SPDES) permits. The EPA’s regulations regarding the approval process for state programs can be found at 40 C.F.R. Part 123. When the EPA approves a state program, the EPA and the state enter into a Memorandum of Agreement (MOA) outlining the specific elements of the authorized state program.⁹ Of the eleven western states in which the BLM predominately operates, six have received NPDES authorization (see Figure One). Nationwide, 45 states, territories, and tribes have received permitting authority.

Figure One: Western States with and without NPDES Authorization

Western States with NPDES Authorization	Western States without NPDES Authorization
Arizona	Alaska
California	Idaho
Colorado	New Mexico
Montana	
Nevada	
Oregon	
Utah	
Wyoming	

Permitting procedures for state-issued permits generally follow the EPA procedures described below. EPA regulations mandate that state permit programs include certain elements,¹⁰ but for aspects that are not mandated, such as appeal procedures, states often differ from Federal procedures. Substantively, state programs must be at least as stringent as the Federal program.

⁸ 40 C.F.R. § 123.21.

⁹ 40 C.F.R. § 123.24.

¹⁰ 40 C.F.R. § 123.25. Signatory requirements, certain boilerplate provisions, limitation calculation methods, and issuance procedures are required.

Even if a state has been granted permitting authority, the EPA continues to have oversight authority as a copy of every permit application and notice of every permit action must be forwarded to the EPA.¹¹ The EPA can, under certain conditions,¹² veto a state-issued permit.

IV. NPDES Permits

Any person responsible for the discharge of a pollutant into the waters of the United States from a point source must apply for and obtain a National Pollutant Discharge Elimination System (NPDES) permit. See 40 C.F.R. § 122.21 for a full discussion of the information required in NPDES permit applications.

A. NPDES Permit Process

Any operator of a facility that discharges pollutants from a point source into waters of the United States must apply for an NPDES permit. An application must be submitted 180 days prior to commencing the discharge.¹³

When the permitting authority receives a permit application, it reviews it for completeness and is required to notify the applicant if any information is missing.¹⁴ The permitting authority then must decide to either tentatively prepare a draft permit or tentatively deny the application. If the permit is tentatively denied, the applicant and the public must be notified.¹⁵

If the permitting authority decides to tentatively issue a permit, it must prepare a draft permit. The draft permit then must go through a public notice and comment period as outlined in

¹¹ CWA §§ 402(b)(5) and (d)(1).

¹² These conditions are outlined in CWA § 402(d) and implemented by 40 C.F.R. § 123.44.

¹³ 40 C.F.R. sec 122.21(c)(1).

¹⁴ 40 C.F.R. § 124.3(c).

¹⁵ 40 C.F.R. § 124.6(a) and (b).

40 C.F.R. § 124.10-124.15. For “new sources,” an environmental impact statement (EIS) may need to be prepared prior to issuing a permit.¹⁶ An NPDES permit cannot be issued for more than five years and must be renewed through a similar application, notice and comment process.¹⁷

B. NPDES Permit Provisions

NPDES permits have five general provisions: technology-based limitations, water quality-based limitations, monitoring and reporting requirements, standard conditions, and special conditions. In addition, NPDES permits contain anti-backsliding clauses which require that once a provision is in place the limit cannot be relaxed; i.e. the limit will remain at the original level or a more restrictive level, but will not be reduced to a less restrictive requirement.

i. Technology-Based Limitations

The CWA requires all point source dischargers to comply with technology-based effluent limitations.¹⁸ These limitations rely on the ability of end-of-pipe equipment and process technology to reduce the amount of pollutants discharged to a water body. The EPA has established nationwide technology standards on an industry-by-industry basis.¹⁹ Although technology-based limits are set based upon available technology, permittees are not required to implement any specific pollution control technology. Facilities may choose any pollution control technology as long as permit effluent limits are met.

¹⁶ 40 C.F.R. § 122.29(c).

¹⁷ CWA § 402(b)(1)(B).

¹⁸ 33 U.S.C. § 1311.

¹⁹ 40 C.F.R. §§. 425-471.

The CWA grants the EPA considerable discretion in establishing effluent limitations for different types and classes of point source dischargers. Best practicable control technology (BPT) is a minimum standard for each class of industry emitting pollution.²⁰ This is a baseline level of control applicable in all circumstances. Best conventional pollution control technology (BCT) is determined for conventional pollutants (Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), fecal coliform, pH, and oil and grease).²¹ BCT is more restrictive than BPT. Best available technology (BAT) is the most stringent phase of pollution control.²² BAT limits are set for dischargers of toxic and nonconventional pollutants. Congress intended cost to play a lesser role in setting BAT limits than in setting BCT or BPT. The CWA requires the EPA to consider the cost to industry when setting BPT and BCT, but only to consider whether BAT limits are “economically achievable.”²³

The CWA also establishes different standards for “new sources.” EPA regulations define “new source” to mean a “building, structure, facility, or installation ... the construction of which is commenced ... after promulgation of standards of performance ... which are applicable to such source”²⁴ In other words, if the EPA has promulgated a new source performance standard (NSPS) applicable to such a source, the facility is considered to be a “new source” and BAT/BCT limits apply. New sources are required to meet NSPS limits which reflect “the greatest degree of effluent reduction ... achievable through application of the best available demonstrated control technologies, processes, operating methods or other alternative.”²⁵ Effectively, EPA sets NSPS standards at BAT levels, but they may be more stringent in order to

²⁰ 33 U.S.C. § 1322(b)(1).

²¹ 33 U.S.C. § 1314(a)(4).

²² 33 U.S.C. § 1317(a)(2).

²³ CWA § 304(b)(2)(B).

²⁴ 40 C.F.R. § 122.2.

²⁵ 33 U.S.C. § 1316(b)(1)(A).

meet water-quality standards, standards for toxic pollutants, and pretreatment standards for industries that discharge into publicly owned treatment works (POTWs).

ii. Water Quality-Based Limitations

Water quality-based limitations are limitations developed in order to achieve compliance with state established ambient water quality standards. These limitations are included in NPDES permits if technology-based limitations alone are not sufficient to meet water quality standards. Water quality standards are included in § 303 of the CWA, and are addressed in greater detail in Chapter Three.

iii. Monitoring

Permittees are required to monitor their own discharges and submit Discharge Monitoring Reports that document the results. The NPDES permit outlines the pollutant parameters that must be sampled, the place where sampling must occur, the frequency and method of sampling, the analysis techniques, and the frequency of reporting. Noncompliance reports also must be submitted stating the cause of a noncompliance, period of noncompliance, and plans to eliminate recurrence of the incident.

iv. Standard Conditions

EPA regulations require that certain standard conditions must be included in all NPDES permits. These conditions are set forth in 40 C.F.R. §§ 122.41 – 122.42, but the most significant conditions include:

- An express duty to minimize or prevent any permit violation that has a reasonable likelihood of adversely affecting human health or the environment;

- A duty to properly operate and maintain the facility and its treatment equipment at all times;
- A duty to allow the permitting authority to enter and inspect the premises, take samples, and have access to records;
- A requirement to report planned changes to the facility, anticipated noncompliance, and transfers to new owners or operators; and
- A prohibition on bypassing any portion of the treatment facility unless the bypass is necessary for essential maintenance.

v. Special Conditions

Above and beyond the standard conditions, NPDES permits may contain additional site-specific conditions. These special conditions are often determined on a facility-by-facility basis and are reflected in each facility's NPDES permit.

C. Additional Permit Requirements

In addition to the five general provisions, permits may also require compliance with best management practices (BMPs), total maximum daily loads (TMDLs), and other federal statutes. BMPs are procedures designed to prevent or minimize the release of toxic pollutants. For example, mining related point sources have been required to minimize excess water entering a mine site by diverting water around the mine.²⁶

As will be discussed in Chapter Three, the CWA requires that states identify and establish a priority ranking for waterbodies for which technology-based effluent limitations are not sufficient. For these waters, the states must establish TMDLs. Aspects of a TMDL can be incorporated into a point source's NPDES permit as enforceable provisions.

Permits may also reflect requirements from other Federal statutes. EPA regulations list several statutes affecting activities on Federal lands whose substantive and procedural

²⁶ Glicksman, *supra* note 1.

requirements may be incorporated into CWA permits.²⁷ These include the Wild and Scenic Rivers Act, the Endangered Species Act, the National Environmental Policy Act, and the Fish and Wildlife Coordination Act.

D. Types of NPDES Permits

A permit issued to a point source discharger can either be an individual permit or a general permit. Individual permits are issued to one facility/source based on site-specific information. General permits, on the other hand, cover a group or category of similar but separately located facilities. Under general permits, site-specific information is not evaluated and individual facilities do not need to submit permit applications. Facilities wishing to be covered by a general permit must submit a notice of intent to be covered.

Substantively, general permits are identical to individual permits. They contain the same types of provisions discussed above. The purpose of a general permit is to efficiently permit large numbers of similar sources in the most efficient manner. General permits are being used extensively for storm water discharges (see Chapter Seven), and have also been approved for offshore oil and gas operations.

²⁷ 40 C.F.R. § 122.41.