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The Regulation of Produced Water from Coalbed Methane Development under the Clean Water Act: Northern Plains Resource Council v. Fidelity Exploration & (and) Development Company

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**THE REGULATION OF PRODUCED WATER FROM
COALBED METHANE DEVELOPMENT UNDER THE
CLEAN WATER ACT: *NORTHERN PLAINS RESOURCE
COUNCIL V. FIDELITY EXPLORATION &
DEVELOPMENT COMPANY***

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I. INTRODUCTION

Methane is an important constituent of natural gas, produced from conventional sandstone and limestone reservoirs for decades. In the last ten years, the Federal Government encouraged methane production from subsurface coal seams to supplement dwindling national gas reserves¹, and recently a major coalbed methane (“CBM”) development program was approved in the Powder River Basin (“PRB”). The

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1. 42 U.S.C. §13368(b), (d) (2000) (detailing the resolution of competing ownership claims to facilitate development of coalbed methane production).

program will proceed in an area covering eight million acres of private, federal, and state lands, in Wyoming and Montana.

Sixty-one percent of the additional 39,367 CBM wells planned for drilling will occur on Federal lands in Wyoming.² Up to 26,475 CBM wells could be drilled in Montana in the next two decades.³ CBM wells are drilled into subsurface coal seams. Drillers extract core samples to evaluate the gas content of the seam and the ability of the methane to flow to the surface. Pumping water from the CBM well to the land surface releases methane. As the amount of water in the coal decreases, methane production increases.⁴ From 1997 through 2000, the amount of water produced from CBM wells in the PRB increased ten-fold, from approximately 130,000 barrels per day to 1.28 million barrels per day.⁵

The term "produced water" refers to liquids produced from the drilling of CBM wells. CBM produced water consists of groundwater, saline water drill cuttings, lubricants, and oil, which can pollute surrounding creeks and rivers when discharged on to the surrounding landscape. Federal and state agencies are charged with the responsibility of regulating the discharge of produced liquids. The Clean Water Act ("CWA") compels state governments to establish water quality standards for approval by the Environmental Protection Agency ("EPA"), and to implement those standards through state regulations. The State of Montana is currently developing numeric standards for the quality of produced water discharged from CBM wells.⁶

In Montana, the Department of Natural Resources and Conservation, issues permits allowing the production and discharge of water. Pollution of groundwater from CBM wells in Montana is prohibited by both state law and federal legislation.⁷ However, in 2002 the District Court of Montana ruled that saline water produced from CBM wells was not a pollutant as defined in the CWA, because the CBM operator did not add anything to the water produced from CBM wells before

2. BUREAU OF LAND MGMT., FINAL ENVIRONMENTAL IMPACT STATEMENT AND PROPOSED PLAN AMENDMENT FOR THE POWDER RIVER BASIN OIL AND GAS PROJECT 2-10 (Jan. 2003), available at <http://www.wy.blm.gov/nepa/prb-feis/index.htm>.

3. BUREAU OF LAND MGMT., STATE OF MO. DEP'T OF ENVTL. QUALITY, FINAL STATEWIDE OIL AND GAS ENVIRONMENTAL IMPACT STATEMENT AND PROPOSED AMENDMENT OF THE POWDER RIVER AND BILLINGS RESOURCE MANAGEMENT PLANS 2-25 (Jan. 2003), available at <http://www.deq.state.mt.us/CoalBedMethane/finaleis.asp>.

4. ADVANCED RESOURCES INTERNATIONAL, POWDER RIVER BASIN COAL BED METHANE DEVELOPMENT AND PRODUCED WATER MANAGEMENT STUDY (2002).

5. C.A. RICE ET AL., U.S. GEOLOGICAL SURVEY, WATER CO-PRODUCED WITH COALBED METHANE IN THE POWDER RIVER BASIN, WYOMING: PRELIMINARY COMPOSITIONAL DATA OPEN-FILE REPORT NO. 00-372 (2000), available at http://www.wy.blm.gov/mineral/og/cbmdocs/usgs_ofr/openfilecrptoo_372.pdf.

6. Jennifer McKee, *Methane bills set for debate*, BILLINGS GAZETTE, Jan. 28, 2003, at C4, available at 2003 WL 11202233.

7. MONT. CODE ANN. §85-2-505(1) (2003).

discharge.⁸ In April 2003, the Ninth Circuit reversed the trial court decision and ruled that produced water satisfies the definition of a "pollutant" under the CWA.⁹ The Court held that produced water is an industrial waste subject to regulation under the CWA, because the water is derived from industrial gas extraction.¹⁰ In its decision, the Ninth Circuit noted the "goal of the CWA is to protect receiving waters...and to restore and maintain the chemical, physical and biological integrity of the Nations' waters."¹¹ On October 20, 2003, the United States Supreme Court denied certiorari.¹²

The Clean Water Act

In 1969, the Santa Barbara oil spill and the Cuyahoga River fire further fueled the growing environmental conscience of the United States, leading to the passage of amendments to the Federal Water Pollution Control Act ("FWPCA"), now referred to as the Clean Water Act.¹³

The history of water pollution control finds its roots in the Refuse Act of 1899.¹⁴ The Refuse Act prohibited the discharge of refuse into navigable waters.¹⁵ However, the Refuse Act proved insufficient for several reasons. Specifically, the Act lacked clarity in its standards for granting or denying permits, and its inadequate penalties created to prompt compliance. Congress enacted the beginnings of the current CWA in 1948, as the FWPCA, and the Act focused on the development and maintenance of specific water standards.¹⁶ The Act still proved to be insufficient, as a result of cumbersome enforcement and an overly limited scope. The CWA, as we know it today, resulted from substantial amendments to the FWPCA in 1972. The amendments included the development of discharge limit guidelines, water quality requirements,

8. *Northern Plains v. Redstone Gas*, No. 00-CV-105, 2002 WL 31054969, at *1 (D.Mont. Aug. 23, 2002), *rev'd sub nom.* *Northern Plains Res. Council v. Fid. Exploration & Dev. Co.*, 325 F.3d 1155, 1160 (9th Cir. 2003), *cert. denied*, 124 S.Ct. 434 (Oct. 20, 2003).

9. *Northern Plains Res. Council*, 325 F.3d at 1163.

10. *Id.* at 1160-61.

11. *Id.* at 1162.

12. *Fid. Exploration & Dev. Co. v. Northern Plains Res. Council*, 124 S.Ct. 434 (Oct. 20, 2003).

13. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. § 1151 (2000)); Jonathan H. Adler, *Fables of the Cuyahoga: Reconstructing a History of Environmental Protection*, 14 FORDHAM ENVTL. L.J. 89, 90-91 (2002).

14. Refuse Act of 1899, 33 U.S.C. § 407 (2000) (original version at ch. 425, § 13, 30 Stat. 1152 (1899)) (still referenced on occasion). See, e.g., *United States v. Hercules, Inc.*, 961 F.2d 796, 798 (8th Cir. 1992); *United States v. Ashland Oil Inc.*, 705 F. Supp. 270, 271 (W.D. Pa. 1989).

15. 33 U.S.C. § 407.

16. Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948).

and a permitting program. Further amendments¹⁷ to the CWA occurred since this time and include amendments in 1987 that resulted in greater EPA enforcement tools, stricter water quality requirements, codification of storm water discharge requirements, and administrative penalties.¹⁸ In response to the Exxon Valdez oil spill, amendments enacted in 1990 strengthened federal regulation of oil spills under the CWA and resulted in the passage of the Oil Pollution Control Act.¹⁹

The objective of the CWA is, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."²⁰ In order to meet this objective the CWA incorporates the following goals:

- a. The elimination of the discharge of pollutants into the navigable waters;²¹
- b. The attainment of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water²²; and
- c. The prohibiting of discharge of toxic pollutants in toxic amounts.²³

The EPA and the courts, in their interpretation and application of the CWA, reflect Congress' broadly worded objectives and goals.²⁴

In the leading decision that analyzes the regulation of CBM produced water, *Northern Plains Resource Council v. Fidelity Exploration and*

17. See Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948); Water Pollution Control Act Amendments of 1956, Pub. L. No. 84-660, 62 Stat. 1155; Federal Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 70 Stat. 498; Water Quality Act of 1965, Pub. L. No. 89-234, 70 Stat. 498; Clean Water Restoration Act of 1966, Pub. L. No. 89-753, 70 Stat. 498; Water Quality Improvement Act of 1970, Pub. L. No. 91-224, 70 Stat. 506; Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 84 Stat. 91; Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566; Municipal Wastewater Treatment Construction Grant Amendments of 1981, Pub. L. No. 97-117, 95 Stat. 1623; Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7; and Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484.

18. See generally Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 76 (amending the Clean Water Act by providing stricter quality standards and enforcement procedures).

19. Browne Lewis, *It's Been 4380 Days and Counting Since EXXON VALDEZ: Is It Time to Change the Oil Pollution Act of 1990?*, 15 TUL. ENVTL. L.J. 97, 100 (2001); Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484.

20. 33 U.S.C. § 1251(a) (2000).

21. 33 U.S.C. § 1251(a)(1). The term "navigable waters" has been broadly defined by the CWA as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7) (2000). EPA regulations similarly define "waters of the U.S" and few if any exemptions exist. The definition of "navigable waters" encompasses essentially all water in the United States. See 40 C.F.R. § 122.2 (2004) (outlining the National Pollutant Discharge Elimination System's definitions and requirements).

22. 33 U.S.C. § 1251(a)(2).

23. 33 U.S.C. § 1251(a)(3).

24. The objectives, goals, and policies of the CWA are not legally mandated.

Development Company, the Ninth Circuit interprets the plain language of the CWA to reflect the intent of Congress.²⁵ Notwithstanding continued refinement of the interpretation of Congressional intent, confusion persists.

II. BACKGROUND

A. THE PARTIES

The plaintiff-appellant is Northern Plains Resource Council ("NPRC"), a Montana grassroots conservation and agricultural group, organized to preserve and protect family farms and ranches, including water quality and the quality of life of the people on the Northern Plains.²⁶ The Council was formed in 1972, out of concerns about natural resource development in the Bull Mountain and Colstrip area, and is now an active conservation group that focuses on mining and natural resource development.²⁷

Fidelity Exploration and Production Company ("Fidelity"), the defendant-appellee, is one of the largest hydrocarbon exploration and production operators in the Rocky Mountain region. Headquartered in Denver, Colorado, a merger between Fidelity Oil Group and WBI Production in 1999 formed Fidelity.²⁸ Fidelity further expanded its asset base through the acquisition of Preston Reynolds and Company

25. Northern Plains Res. Council v. Fid. Exploration & Dev. Co., 325 F.3d 1155, 1160 (9th Cir. 2003).

26. NORTHERN PLAINS RESOURCE COUNCIL, ABOUT US, at <http://www.northernplains.org/about/default.asp> (last visited Oct. 24, 2004). At the time of writing, the NPRC was also involved in other legal actions concerning CBM including three with the United States Bureau of Land Management. One legal action was pertaining to the lack of public input in relation to the approval of a 178-well expansion project by Fidelity; another challenging the adequacy of BLM's CBM development plan for Montana; and a third on the issuing of mineral leases before completing an in-depth environmental study, which is presently being appealed. Press Release, Northern Plains Resource Council, Conservation Group Sues BLM State Director Marty Ott Over Methane Expansion (Dec. 8, 2003), www.northernplains.org. The NPRC also filed legal action in 2001 against Fidelity, alleging the company violated the CWA when it constructed its CBM project discharge locations, water storage reservoirs, channel crossings, and roads without permits. Press Release, Northern Plains Resource Council, Northern Plains, Fidelity Announce Settlement: Threatened Lawsuit Dropped, Water Monitoring, Cessation of Discharges into Ponds Pledged (Aug. 25, 2004), www.northernplains.org. Fidelity considered the channels not to be "waters of the United States" and argued that permits were therefore not required. The trial was scheduled early in January. However, a settlement was reached in late 2003, in which Fidelity agreed to move some of its water storage reservoirs and to seek permits for the others. *Id.*

27. See generally NORTHERN PLAINS RESOURCE COUNCIL, ABOUT US, at <http://www.northernplains.org/about/default.asp> (last visited Oct. 24, 2004) (providing an overview of the organization's goals and purposes).

28. FIDELITY EXPLORATION & PROD. CO., COMPANY PROFILE, at http://www.fidelityepco.com/docs/fep_profile.html (last visited Oct. 25, 2004).

and its operating division of Redstone Gas Partners.²⁹ Presently, the company possesses net lease assets of more than 232,000 acres, most of which are located in the Powder River Basin of Wyoming and Montana.³⁰

The Montana State Legislature formed the Montana Department of Environmental Quality ("MDEQ") in July of 1995 through Senate Bills 234 and 345. The MDEQ's organizational allows centralized services by functional area. The department's mission is to "*protect, sustain, and improve a clean and healthful environment to benefit present and future generations.*"³¹

The EPA provides state program oversight of CBM development under the CWA. The agency was formed in July of 1970 to coordinate federal efforts in environmental enforcement.³² The agency is headquartered in Washington, D.C., employs 18,000 employees, and operates ten regional offices.³³ The State of Montana is in EPA Region 8.³⁴ The EPA regional office is in Denver, Colorado and the operations office is in Helena, Montana.³⁵

B. THE FACTS

Since 1997, Fidelity extracted CBM, for commercial use, from coal seams located in Montana.³⁶ The CBM extracting process consists of pumping groundwater to the surface.³⁷ Trapped methane is released from the coal, captured in pipes, and transported to market. As part of the CBM production process, Fidelity discharges the water pumped from CBM wells into the Tongue River and Squirrel Creek without adding any chemicals or altering it in any manner.³⁸

29. *Id.*

30. FIDELITY EXPLORATION & PROD. CO., PRODUCTION & RESERVES, *at* http://www.fidelityepco.com/docs/fep_production.html (last visited Sept. 15, 2004).

31. MONTANA DEP'T OF ENVTL. QUALITY, HOME PAGE/INDEX, *at* <http://www.deq.state.mt.us/index.asp> (last visited Sept. 15, 2004).

32. UNITED STATES ENVTL. PROT. AGENCY, OUR MISSION & OUR HISTORY, *at* <http://www.epa.gov/cgi-bin/epaprintonly.cgi> (last visited Oct. 25, 2004).

33. *Id.* at ABOUT EPA: WHO WE ARE, *at* <http://www.epa.gov/epahome/aboutepa.htm>.

34. *Id.* at ABOUT EPA: REGIONS, *at* <http://www.epa.gov/epahome/locate2.htm>.

35. *Id.* at ABOUT EPA REGION 8, *at* <http://epa.gov/region8/about/index.html>.

36. Northern Plains Res. Council v. Fid. Exploration & Dev. Co., 325 F.3d 1155, 1158 (9th Cir. 2003). CBM is found in most coal deposits. It is created during the process of coalification and usually consists of pure methane. The methane is located within the coal seam and as a result of the intense pressure of the seam; it remains attached to the coal.

37. This process is known as dewatering by which the water of coal seams in the vicinity of producing wells is pumped to the surface. The process of dewatering is necessary to reduce the pressure within the coal seam and thereby allow methane gas to be released.

38. *Id.* at 1158-59.

In its natural state, groundwater contains different characteristics when compared to surface water in creeks and rivers. The groundwater that Fidelity pumped out of its CBM wells is different from the surface water in the Tongue River and Squirrel Creek. The groundwater may contain chemical constituents and metals, is three times "saltier," and has a sodium absorption ratio ("SAR") forty to sixty times greater than the receiving waters.³⁹ The MDEQ recognized that salt and high SAR water destroys soil structure, while reducing the soil's ability to drain water.⁴⁰ "The MDEQ [also] cautioned that unregulated discharge of CBM water would cause [s]urface water quality in some watersheds [to] be slightly too severely degraded, resulting in restricted downstream use of some waters."⁴¹

However, in response to a request from Fidelity dated August 1998, the MDEQ informed Fidelity that, under the Montana Water Quality Act, no permit was needed to discharge groundwater into the Tongue River.⁴² The discharge satisfied the exemption under Section 75-5-401(1) (b) of the code that states:

Discharge to surface water of ground water that **is not altered from its ambient quality** does not constitute a discharge requiring a permit under this part if:

- (i) the discharge does not contain **industrial waste**, sewage, or other wastes;
- (ii) the water discharged does not cause the receiving waters to exceed applicable standards for any parameters; and
- (iii) to the extent that the receiving waters in their ambient state exceed standards for any parameters, the discharge does not increase the concentration of the parameters.⁴³

In the same letter, the MDEQ also advised Fidelity that the EPA disagreed⁴⁴ with the permit exemption under the Code; accordingly the CBM operator might require a Montana Pollution Discharge Elimination System ("MPDES") permit or a National Pollution Dis-

39. *Id.* at 1158.

40. *Id.*

41. *Id.* (internal quotations omitted).

42. *Id.* at 1158-59.

43. Montana Water Quality Act, MONT. CODE ANN. § 75-5-401(b) (2003) (emphasis added).

44. Northern Plains Res. Council v. Fid. Exploration & Dev. Co., 325 F.3d 1155, 1159 (9th Cir. 2003). The EPA considered the permit exclusion under section 75-5-401(1)b of the Montana Water Quality Act to be in conflict with the CWA in that it exempted discharges that were to be subject to it. *Id.* The MDEQ disagreed that the discharges in question constituted a 'pollutant' within the meaning of the CWA. *Id.*

charge Elimination System ("NPDES") permit⁴⁵ for the future discharge.

Even if Fidelity filed a MPDES permit application in January 1999, from 1997 to June 2000 Fidelity discharged groundwater into both Squirrel Creek and the Tongue River without a permit.⁴⁶ Fidelity only received a permit in June 2000, thereby allowing them to discharge into the Tongue River and only from seven out of twelve outfalls already in use.⁴⁷ The permit did not apply to any of the Squirrel Creek outfalls.⁴⁸

C. THE PROCEDURE

Following a 60-day Notice of Intent to Sue filed in June 2000, the NPRC filed a citizen suit against Fidelity in Federal District Court, under the CWA.⁴⁹ The plaintiff alleged unpermitted discharges into Squirrel Creek and into the Tongue River from the outfalls not covered by the MPDES permit. The parties filed cross-motions for summary judgment in which the litigants stipulated to four of five following elements required to establish a contravention of the CWA: (1) a discharge; (2) from a point source; (3) into navigable water; (4) without a permit.⁵⁰ Summary Judgment was granted to Fidelity by the district court on the grounds that the CBM produced water was not a "pollutant" within the meaning of the CWA, and that Montana State law exempted Fidelity from CWA permitting requirements.⁵¹

The NPRC appealed to the Ninth Circuit and received amicus support from environmental and aboriginal groups, including the Tongue & Yellowstone Irrigation District, the Tongue River Water Users' Association, the Northern Cheyenne Tribe, whose reservation borders the Tongue River, and the Western Environmental Trade Association, an industry advocacy group.⁵²

45. NPDES permit program of the CWA requires, with some exemptions, that all dischargers of pollutants from a point source into U.S. waters obtain a NPDES permit. 33 U.S.C. § 1342(a) (2000). Most states also run their own permitting program. State-run programs must be as stringent if not more stringent than the NPDES permitting program. 33 U.S.C. § 1370 (2000).

46. *Northern Plains Res. Council*, 325 F.3d at 1159.

47. *Id.* at 1159 n.2. On June 16, 2000, the permit was expanded from seven to ten of the outfalls. *Id.*

48. *Id.*

49. *Id.*

50. Transcript of Motion Hearing, *Northern Plains v. Redstone*, 2002 WL 31054969 (D.Mont. Aug. 23, 2002) (No. 00-105-BLG-SHE) (on file with author).

51. *Northern Plains v. Redstone Gas*, No. 00-CV-105, 2002 WL 31054969, at *1 (D.Mont. Aug. 23, 2002).

52. *Northern Plains Res. Council v. Fid. Exploration & Dev. Co.*, 325 F.3d 1155, 1157 (9th Cir. 2003).

III. *NORTHERN PLAINS RESOURCE COUNCIL v. FIDELITY EXPLORATION & DEVELOPMENT COMPANY*

A. QUESTIONS RAISED

The CWA prohibits the discharge of any pollutant from a point source⁵³ into navigable waters of the United States without a NPDES permit.⁵⁴ All parties agreed that Fidelity discharged CBM water into the Tongue River and Squirrel Creek. The point of disagreement was whether the discharged groundwater qualified as a "pollutant" within the meaning of the CWA, if so; did Fidelity qualify for an exemption under Montana state law?⁵⁵

B. THE COURT OF APPEALS HOLDING

1. Is groundwater a "pollutant" within the CWA's meaning?

The CWA defines "pollutant" broadly, but does not specifically list "unaltered groundwater" as a pollutant. Under the CWA, "pollutant" includes "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste."⁵⁶ Nevertheless, the courts interpret the term broadly to include nearly any material.⁵⁷

Exemptions to the pollutant classification and the required permit are described in the CWA. The exemptions include:

[W]ater, gas, or other material which is injected into a well to facilitate production of oil and gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to

53. See generally 33 U.S.C. § 1251 (2000) (describing the policy and requirements of the Clean Water Act). Point source is broadly defined by the CWA as "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." 33 U.S.C. § 1362(14) (2000).

54. *Northern Plains Res. Council*, 325 F.3d at 1160 (citing 33 U.S.C. §§ 1311(a), 1342 (2000)). See also *Ass'n to Protect Hamersley, Eld & Totten Inlets v. Taylor Res., Inc.*, 299 F.3d 1007, 1009 (9th Cir. 2002).

55. *Northern Plains Res. Council*, 325 F.3d at 1160, 1164.

56. 33 U.S.C. § 1362(6) (2000).

57. See, e.g., *United States v. Hamel*, 551 F. 2d 107, 110 (6th Cir. 1977); *Natural Res. Def. Council v. Envtl. Prot. Agency*, 859 F. 2d 156, 189 (D.C. Cir. 1988). See also *United States v. Teixeira Foods Inc.*, C.R. 98-1015 (C.D. Cal. January 13, 1999) (holding that the disposal of 100 ostrich carcasses into tributary resulted in the discharge of a "pollutant"); *United States v. West Indies Transp. Inc.*, 127 F. 3d 299, 307-08 (3d Cir. 1997) (dumping of 250-ton concrete blocks from a barge amounted to the discharge of "pollutant").

facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.⁵⁸

The District Court concluded that water produced from CBM wells was not a "pollutant." The court held that produced water did not fall within the definition of a "pollutant" under the CWA, since unaltered groundwater is not specifically listed in the CWA.⁵⁹ The District Court concluded that water produced from CBM wells did not qualify as "produced water," which falls within the definition of "industrial waste," because no chemicals were added, nor was the water considered a "pollutant" since Fidelity did not alter the water before discharge.⁶⁰ Essentially, the District Court found water produced from CBM wells to qualify as unpolluted, non-produced water.

On appeal, the Ninth Circuit reversed the District Court's decision. The Ninth Circuit held that CBM produced water did qualify as a "pollutant," because it is "industrial waste."⁶¹ The Court of Appeals noted that "industrial waste" is not limited to the most toxic industrial by-products, but also encompasses wastes like "produced water" or "brine residues."⁶² Relying on dictionary definitions of industry, industrial, and waste, the Court of Appeals defines "industrial waste" as "any useless by-product derived from the commercial production and sale of goods and services" and concluded that this definition squarely applied to produced water.⁶³ As such, the Court of Appeals considered water produced by CBM wells to qualify as "produced water" and consequently "industrial waste." The EPA defines produced water as "water brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and *can* include formation water, injection water, and any chemical added downhole or during the oil/water separation process."⁶⁴ Even if no chemicals were added, the water produced by CBM wells satisfies the characteristics of the definition of "produced water." Furthermore, the CBM produced water at issue does not satisfy the required CWA exemption criteria. Indeed, Fidelity does not dispose of the groundwater in accordance with the CWA exemption crite-

58. 33 U.S.C. § 1362(6) (2000).

59. *Northern Plains Res. Council*, 325 F.3d at 1157.

60. *Id.* at 1160.

61. *Id.* at 1161.

62. *See, e.g., Sierra Club v. Cedar Point Oil Co.*, 73 F.3d 546, 568-69 (5th Cir. 1996) (concluding that "industrial waste" includes "produced water"); *Umatilla Water Quality Protective Ass'n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1322 (D. Or. 1997) (holding that "industrial waste" includes "brine residues").

63. *Northern Plains Res. Council*, 325 F.3d at 1161 (quoting AMERICAN HERITAGE DICTIONARY 672 (1979)).

64. *Id.* at 1161 (citing 40 C.F.R. §§ 435.41 (bb), 435.11 (bb)) (emphasis added).

ria, but disposes of the water by direct discharge into the Tongue River and Squirrel Creek, therefore, is a "pollutant."⁶⁵

Similar to the arguments used in the *APHETI* case, this Court also concluded that characterizing CBM water as a "pollutant" is consistent with the definition of "pollution" in CWA.⁶⁶ The Court of Appeals noted that "pollution" is the "man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of the water."⁶⁷ Studies proved that by discharging groundwater into waterways, the quality of water may be degraded and its use limited.⁶⁸ Therefore, those discharges cause "pollution" as defined by the CWA. Contrary to the decision of District Court, the Court held that the CWA does not require that man alter the discharged water, but that the alteration of the chemical integrity of the receiving waters is "man-induced," since the produced water would not flow into the Tongue River and Squirrel Creek but for Fidelity's discharge.⁶⁹ The Ninth Circuit concluded that an opposite interpretation undermines the integrity of the prohibitions in the CWA, which aim to protect the integrity of receiving waters. The Court of Appeals held that the District Court misapplied the *APHETI* case by concluding that, "only those substances 'transformed by human activity' can be pollutants under the CWA."⁷⁰ On the contrary, the introduction of natural contaminants by man renders them pollutants. Construing the *APHETI* case in a different way upsets the integrity of the CWA.

Last, the Ninth Circuit noted that other appellate courts already held "that transporting water from one water body to another can violate the CWA."⁷¹ The courts rejected the argument that discharged water cannot be a "pollutant," because the discharged water remained unaltered and was transported from one body of water to another. The Court of Appeals decided that the above precedents apply in this

65. *Cf. Cedar Point Oil*, 73 F.3d at 568 (explaining the produced exemption under the Clean Water Act).

66. *Northern Plains Res. Council*, 325 F.3d at 1162. See *Ass'n to Protect Hamersley, ELD, & Totten Inlets (APHETI) v. Taylor Res., Inc.*, 299 F.3d 1007, 1009 (9th Cir. 2002) (exploring whether the definition of "pollutant" includes biological materials discharged by mussels).

67. 33 U.S.C. § 1362(19) (2000).

68. *Northern Plains Res. Council*, 325 F.3d at 1158 (citing the Montana Statewide Final Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings Resource Management Plans Soils Appendix SOI-1, available at www.deq.state.mt.us/CoalBedMethane/finales.asp).

69. *Id.* at 1162 (citing *Miccosukee Tribe v. S. Fla. Water Mgmt. Dist.*, 280 F.3d 1364, 1368 (11th Cir. 2002)).

70. *Id.* at 1162-63 (quoting *APHETI*, 299 F.3d at 1017).

71. *Id.* at 1163. See also *Miccosukee Tribe*, 280 F.3d at 1367; *Catskill Mountains Chapter of Trout Unlimited v. City of New York*, 273 F.3d 481, 492-93 (2d Cir. 2001); and *Dubois v. U.S. Dept of Agriculture*, 102 F.3d 1273, 1299 (1st Cir. 1996) (all holding that an NPDES permit is required when a transfer of water containing pollutants occurs).

case. The Court of Appeals held that CBM produced water is a “pollutant” under the CWA.

2. Can Fidelity be relieved of CWA permitting requirements under Montana state law?

The District Court concluded that the EPA implicitly approved the exemption stated in the Montana Code, by allowing the State to operate the EPA-approved, state-permitting program.⁷² The Trial Judge concluded that, without violating the CWA, Fidelity did not need a permit to discharge produced water into the Tongue River and Squirrel Creek.

The Court of Appeals rejected this inference and held that the state law exemption violated the CWA. First, the EPA does not retain the authority to exempt discharges otherwise subject to the CWA. Such authority falls only within the power of Congress.⁷³ Furthermore, the State of Montana is not authorized to exempt discharges under the CWA, especially when those standards are less stringent than the CWA.⁷⁴ Finally, the CWA does not delegate exemption authority to the EPA nor to the State of Montana; in addition, the Supremacy Clause in the Constitution invalidates state laws that “interfere with, or are contrary to, federal law.”⁷⁵ Therefore, the Ninth Circuit reasoned that the exemption contained in Montana State law violates the CWA. The Montana Code cannot exempt Fidelity from obtaining a discharge permit under the CWA.

3. Holding

Since the Ninth Circuit concluded that CBM produced water is a “pollutant” subject to regulation under the CWA, and the exemption under Montana State law is illegal, the Court reversed the District Court’s decision.

On July 27, 2004, the Northern Plains Resource Council submitted a sixty-day notice to Fidelity Exploration and Production Company to comply with the CWA, which specifically addressed securing discharge permits “before discharging high sodium methane wastewater into pits

72. *Northern Plains Res. Council*, 325 F.3d at 1164.

73. *American Mining Congress v. Envtl. Prot. Agency*, 965 F. 3d 759, 772 (9th Cir. 1992) (citing *Natural Res. Defense Council v. Costle*, 568 F.2d 1369, 1374 (D.C. Cir 1977)).

74. 33 U.S.C. § 1370 (2000).

75. U.S. CONST. art. VI, cl. 2. *See also Nat’l Audubon Soc’y, Inc. v. Davis*, 307 F. 3d 835, 851 (9th Cir. 2002) (stating that state laws interfering with or conflicting with federal law are invalid).

located on Tongue River tributaries.”⁷⁶ The Chair of the Northern Plains coal bed methane task force stated, “Fidelity has an obligation to comply with the Clean Water Act and Montana’s water quality standards – that means getting discharge permits for wastewater pits and complying with the water quality standards set by the state.”⁷⁷

V. CONCLUSION

On October 20, 2003, the United States Supreme Court denied certiorari. The ruling of the Ninth Circuit in *Northern Plains Resource Council v. Fidelity Exploration and Development Company* is a leading decision that reviews federal and state regulatory requirements for the treatment of CBM produced water under the CWA and state legislation. The Court of Appeals ultimately concluded that “unaltered groundwater produced in association with methane gas extraction and discharged into a river, is a ‘pollutant’ within the meaning of the CWA.”⁷⁸ In delivering its decision, the Ninth Circuit continued the practice of applying the plain language of the CWA, in order to reason that CBM water is “produced water,” and therefore “industrial waste” that requires an NPDES permit. The Court’s reliance on *Miccosukee Tribe v. S. Fla. Water Mgmt. Dist.* cannot go unnoticed. As in *Miccosukee*, the Ninth Circuit in this case ruled that without the actions of Fidelity, the discharge would have not reached United States waters. The decision further clarified the meaning of the term “man-induced,” previously considered in *Miccosukee* and the phrase “transformed by human activity” in *APHETI*. These terms include the introduction of a discharge into a water body and not just the alteration of the discharge, and thus the simple act of transferring water from one source to another can be considered pollution, specifically when the quality of the receiving water is altered.

76. Press Release, Northern Plains Resource Council, Northern Plains Calls on Fidelity to Comply with Federal, State Standards (July 28, 2004), www.northernplains.org.

77. *Id.*

78. *Northern Plains Res. Council v. Fid. Exploration & Dev. Co.*, 325 F.3d 1155, 1157 (9th Cir. 2003).