

**IN THE SUPREME COURT
OF THE STATE OF MONTANA**

Supreme Court Case No. DA 09–0131

On Appeal from the Montana Twenty-Second Judicial District Court, Big Horn
County, the Honorable W. Blair Jones, Presiding

**NORTHERN CHEYENNE TRIBE, a federally recognized Indian tribe;
TONGUE RIVER WATER USERS' ASSOCIATION; and NORTHERN
PLAINS RESOURCE COUNCIL, INC.,**

Plaintiffs and Appellants,

v.

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY;
RICHARD OPPER, in his official capacity as Director of the Montana
Department of Environmental Quality; and FIDELITY EXPLORATION &
PRODUCTION COMPANY,**

Defendants and Appellees.

APPELLANT NORTHERN CHEYENNE TRIBE'S OPENING BRIEF

James L. Vogel
VOGEL & WALD, PLLC
P.O. Box 525
Hardin, Montana 59034
Tel. (406) 665-3900
Fax: (406) 665-3901
jimvmt@email.com

Attorneys for Northern Cheyenne Tribe

John B. Arum
Brian C. Gruber
ZIONTZ, CHESTNUT, VARNELL,
BERLEY & SLONIM
2101 4th Avenue #1230
Seattle WA 98121
Tel. (206) 448-1230
Fax: (206) 448-0962
jarum@zcvbs.com
bgruber@zcvbs.com

Attorneys for Northern Cheyenne Tribe

Brenda Lindlief Hall
David K.W. Wilson
Reynolds, Motl & Sherwood, PLLP
401 North Last Chance Gulch
Helena, Montana 59601

*Attorneys for Tongue River Water Users'
Association*

Jon Metropoulos
Dana L. Hupp
Gough, Shanahan, Johnson & Waterman
33 South Last Chance Gulch
P.O. Box 1715
Helena, Montana 59624-1715

*Attorneys for Fidelity Exploration &
Production Company*

Jack Tuholske
Tuholske Law Office, P.C.
P.O. Box 7458
Missoula, MT 59807

*Attorney for Northern Plains Resource
Council*

Claudia Massman
Special Assistant Attorney General
Lee Metcalf Building
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

*Attorney for Montana Department of
Environmental Quality*

TABLE OF CONTENTS

TABLE OF AUTHORITIES	iii
STATEMENT OF ISSUES	1
STATEMENT OF THE CASE	1
STATEMENT OF FACTS	3
I. The Tongue River	3
II. The Northern Cheyenne Tribe’s Interest in Protecting Water Quality	3
III. CBM Produced Water	4
A. CBM Produced Water Is a Harmful Pollutant	4
B. Technology Is Available to Treat CBM Produced Water	6
IV. State Water Quality Standards and Effluent Limitations	7
A. The Board’s 2003 CBM Rule	7
B. The Board’s 2006 Rule Amendments	8
V. The Challenged MPDES Permits	10
A. Fidelity’s Permit Applications	10
B. DEQ’s Permitting Actions	11
VI. Relevant EPA Actions	13
STANDARD OF REVIEW	13
SUMMARY OF ARGUMENT	15
ARGUMENT	16

I.	Legal Background – the Clean Water Act	16
A.	Technology-Based Effluent Limitations	18
B.	Water Quality Standards	20
II.	DEQ’s Issuance of the Permits Violated both the CWA and WQA	21
A.	The Permits Fail to Impose TBELs	22
1.	DEQ Failed to Include TBELs in Fidelity’s Permits	22
2.	The District Court Erred in Holding that DEQ Was not Required to Include TBELs in Fidelity’s Permits	25
B.	The Permits Violate the CWA’s and WQA’s Nondegradation Policies	31
III.	DEQ’s Issuance of the Permits Violated MEPA	37
A.	The Montana Environmental Policy Act	37
B.	DEQ Failed to Evaluate Alternative Water Management Options	38
C.	DEQ’s Analysis of the No Action Alternative Was Inadequate	41
	CONCLUSION	44
	CERTIFICATE OF COMPLIANCE	46
	CERTIFICATE OF SERVICE	47

TABLE OF AUTHORITIES

CASES

<i>Alaska Wilderness Recreation and Tourism Ass’n v. Morrison</i> , 67 F.3d 723 (9th Cir. 1995)	38
<i>Amer. Canoe Ass’n, Inc. v. Dist. of Columbia Water and Sewer Auth.</i> , 306 F. Supp. 2d 30 (D.D.C. 2004)	17
<i>American Mining Cong. v. EPA</i> , 965 F.2d 759 (9th Cir. 1992)	36
<i>Bethlehem Steel Corp. v. EPA</i> , 538 F.2d 513 (2d Cir. 1976)	17
<i>Bob Marshall Alliance v. Hodel</i> , 852 F.2d 1223 (9th Cir. 1988)	38
<i>Chemical Mfrs. Ass’n v. EPA</i> , 870 F.2d 177 (5th Cir. 1989)	19
<i>Columbus & Franklin County Metro. Park Dist. v. Shank</i> , 600 N.E.2d 1042 (Ohio 1992)	20, 26-27, 29, 31, 33, 34
<i>E.I. du Pont de Nemours & Co. v. Train</i> , 430 U.S. 112 (1977)	19, 25, 30, 31
<i>Friends of the Wild Swan v. Dep’t of Natural Resources and Conservation</i> , 2000 MT 209, 301 Mont. 1, 6 P.3d 972	14
<i>Kennecott v. EPA</i> , 780 F.2d 445 (4th Cir. 1985)	19
<i>Marsh v. Oregon Natural Resources Council</i> , 490 U.S. 360 (1989)	14
<i>Merlin Meyers Revocable Trust v. Yellowstone County</i> , 2002 MT 201, 311 Mont. 194, 53 P.2d 1268	35-36
<i>Natural Resources Def. Council, Inc. v. Costle</i> , 568 F.2d 1369 (D.C. Cir. 1977)	36
<i>Natural Resources Def. Council, Inc. v. EPA</i> , 859 F.2d 156 (D.C. Cir. 1988)	24, 26, 31
<i>Natural Resources Def. Council v. EPA</i> , 902 F.2d 962 (D.C. Cir. 1990)	36

CASES CONT.

North Fork Pres. Ass'n v. Dep't of State Lands, 238 Mont. 451,
778 P.2d 862 (1989)14

Northern Plains Resource Council v. Fidelity Exploration and Prod. Co.,
325 F.3d 1155 (9th Cir. 2003)5, 10, 27, 35, 36

Our Children's Earth Found.v. EPA, 527 F.3d 842 (9th Cir. 2008)18, 29

Pennaco Energy, Inc. v. Montana Bd. of Env'tl. Review, 2008 MT 425,
347 Mont. 415, 199 P.3d 1914, 5, 9, 13, 14

PUD No. 1 of Jefferson County v. Washington Dep't of Ecology,
511 U.S. 700 (1994)18, 20

Ravalli County Fish and Game Ass'n v. Montana Dep't of State Lands,
273 Mont. 371, 903 P.2d 1362 (1995)37

Riverkeeper, Inc. v. EPA, 358 F.3d 174 (2d Cir. 2004)18

Sagebrush Rebellion, Inc. v. Hodel, 790 F.2d 760 (9th Cir. 1986)37

San Carlos Apache Tribe v. Arizona, 463 U.S. 545 (1983)36

*State ex rel. Greeley v. Confederated Salish and Kootenai Tribes of the
Flathead Reservation*, 219 Mont. 76, 712 P.2d 754 (1985)36

Texas Oil and Gas Ass'n v. EPA, 161 F.3d 923 (5th Cir. 1998)23, 31

United States v. Iron Mountain Mines, Inc., 987 F. Supp. 1263
(E.D. Cal. 1989)25

Weyerhaeuser Co. v. Costle, 590 F.2d 1011 (D.C. Cir. 1978).....17

FEDERAL STATUTES

33 U.S.C. § 1251(a)16

FEDERAL STATUTES CONT.

33 U.S.C. § 1251(a)(1)16

33 U.S.C. § 1311(a)16

33 U.S.C. § 1311(b)17, 22, 23, 26

33 U.S.C. § 1311(b)(1)(C)20

33 U.S.C. § 1311(b)(2)19, 22, 27

33 U.S.C. § 1311(e)22

33 U.S.C. § 131317, 20

33 U.S.C. § 1313(d)(4)20

33 U.S.C. § 1314(b)19

33 U.S.C. § 1316(a)(1).....19, 25, 27

33 U.S.C. § 134222

33 U.S.C. § 1342(a)16

33 U.S.C. § 1342(a)(1)22-23, 26

33 U.S.C. § 1342(a)(1)(B)16, 19

33 U.S.C. § 1342(a)(3)27

33 U.S.C. § 1342(b)23

33 U.S.C. § 1342(b)(1)(A)16, 42

33 U.S.C. § 137027

STATE STATUTES

MCA 75-1-201	43
MCA 75-1-201(1)(b)(i)(B)	41, 42
MCA 75-1-201(1)(b)(iv)	37
MCA 75-1-201(1)(b)(iv)(C)(I)	38
MCA 75-1-201(1)(b)(iv)(C)(IV)	38, 41, 43
MCA 75-1-201(1)(b)(v)	37, 41
MCA 75-5-303	1, 21
MCA 75-5-303(3)	9
MCA 75-5-303(3)(a)	21
MCA 75-5-303(3)(d)	21
MCA 75-5-305(1)	40

FEDERAL REGULATIONS

40 C.F.R. § 122.44	23, 24, 28
40 C.F.R. § 122.44(a)(1)	23, 27, 28
40 C.F.R. § 123.25	16, 27, 42
40 C.F.R. § 123.25(15)	23
40 C.F.R. § 125.3	24, 28, 29
40 C.F.R. § 125.3(a)	22
40 C.F.R. § 125.3(a)(2)(v)	22

FEDERAL REGULATIONS *CONT.*

40 C.F.R. § 125.3(c)	23, 31
40 C.F.R. § 125.3(c)(1)	19, 22
40 C.F.R. § 125.3(c)(2)	19, 22, 23, 28
40 C.F.R. § 125.3(d)	22, 23, 27
40 C.F.R. § 131.12	34
40 C.F.R. § 131.12(a)	20
40 C.F.R. § 131.12(a)(1)	33
40 C.F.R. § 131.12(a)(2)	21, 31, 32, 33
40 C.F.R. § 403.6(d)	25
40 C.F.R. § 1502.14	37

STATE REGULATIONS

ARM 17.4.601.....	43
ARM 17.4.602	43
ARM 17.4.603(2)(a)(i)	38
ARM 17.4.603(2)(a)(iii)	38, 41, 42
ARM 17.4.603(2)(b)	38
ARM 17.4.607(2)(b)	38
ARM 17.4.609(2)	43
ARM 17.4.609(3)(f)	38, 42

STATE REGULATIONS *CONT.*

ARM 17.30.670(2)(a) 7

ARM 17.30.670(3)(a) 7

ARM 17.30.670(6) (2003) 7, 35

ARM 17.30.670(7) (2003) 8

ARM 17.30.670(8) (2003) 8

ARM 17.30.715(1)(f) 9

ARM 17.30.1301 17

ARM 17.30.1303 17

ARM 17.30.1303(1) 23, 27, 42-43

ARM 17.30.1303(2) 16, 23, 27, 42-43

ARM 17.30.1303(3) 23, 27, 42-43

ARM 17.30.1303(3)(a) 19, 24

ARM 17.30.1311(1) 17, 24

ARM 17.30.1322(17)(f) 42

ARM 17.30.1344 19, 24

ARM 17.30.1345 19, 24

ARM 17.30.1361 19, 24

ARM 17.30.1361(2)(c)(i)(B) 12, 34-35

STATE REGULATIONS CONT.

ARM 17.30.136342
ARM 17.30.1365 12, 34-35

MISCELLANEOUS

8 Mont. Admin. Reg. 799 (Apr. 24, 2003)8
10 Mont. Admin. Reg. 1247 (May 18, 2006)8
Pub. L. 102-374, 106 Stat. 11864
S. Rep. No. 92-414 (1971), 1972 U.S.C.C.A.N. 366818
U.S. EPA NPDES Permit Writers' Manual17, 20, 29, 30
Van Putten & Jackson, *The Dilution of the Clean Water Act*,
19 Mich. J. L. Ref. 868 (1986)25, 29

STATEMENT OF ISSUES

(1) Whether issuance by the Montana Department of Environmental Quality (DEQ) of Montana Pollutant Discharge Elimination System (MPDES) permits to Fidelity Exploration & Production Company (Fidelity) violated the Clean Water Act (CWA) and Montana Water Quality Act (WQA) because DEQ did not include technology-based effluent limits on Electrical Conductivity (EC) or Sodium Adsorption Ratio (SAR).

(2) Whether DEQ's issuance of the MPDES permits without undertaking nondegradation review pursuant to MCA 75-5-303 violated the antidegradation policy of the CWA and state law implementing that policy.

(3) Whether DEQ complied with the Montana Environmental Policy Act (MEPA) when it issued a checklist environmental assessment (EA) which analyzed only the proposed action (as modified by DEQ) and a single-paragraph "no action" alternative.

STATEMENT OF THE CASE

In this case, the Northern Cheyenne Tribe (Tribe), Tongue River Water Users' Association (TRWUA) and Northern Plains Resource Council (NPRC) challenge DEQ's issuance of two MPDES permits for the discharge of coal bed methane (CBM) produced water to the Tongue River and the checklist EA prepared by the agency to analyze the environmental impacts of the permits. The

permits, issued February 3, 2006, authorize Fidelity to discharge substantial quantities of untreated CBM water into the high quality waters of the Tongue River.

The Tribe filed its complaint on April 3, 2006, alleging violations of the CWA and WQA for DEQ's failure to include technology-based effluent limits (TBEL) in both permits and to undertake a nondegradation review required by the permitted discharges' significant degradation of the Tongue River's water quality. The Tribe also asserted claims that the permitting decision violated the Montana Constitution and that the EA did not comply with MEPA's requirement to analyze a reasonable range of alternatives to the discharge of untreated CBM water and to thoroughly analyze the no action alternative.

Following intervention by TRWUA, NPRC and Fidelity, all parties submitted cross-motions for summary judgment and the District Court heard oral argument on February 28, 2007. The court issued its Order on Motions for Summary Judgment on December 9, 2008, granting defendants' motions on all four claims. Judgment was entered on January 12, 2009, and notice of the same was served on January 20. The Plaintiffs then noticed their appeals, which were consolidated by the Court.

STATEMENT OF FACTS

I. The Tongue River.

The waters of the Tongue River flow northeasterly from the Bighorn Mountains of Wyoming into Montana and are considered to be “high quality” under the WQA. Tribe’s Exhs. 1 (40), 2 (47).¹ The Tongue River provides important habitat for fish and wildlife, including a number of imperiled species.² The Tongue River also supplies high quality water – the life-blood of agriculture in this semi-arid region – to both Indian and non-Indian farmers and ranchers. Tribe’s Exh. 4 (9). The waters of the Tongue River and its associated riparian ecosystems are used by the Northern Cheyenne for spiritual and medicinal purposes. Tribe’s Exhs. 5 (7-26 to 7-28), 37 (15-16).

II. The Northern Cheyenne Tribe’s Interest in Protecting Water Quality.

The 445,000-acre Northern Cheyenne Reservation was established by Executive Order in 1884 and was extended eastward to the Tongue River in 1900. Tribe’s Exh. 6 (3-58). The Tribe has a vital interest in protecting the high quality waters of the Tongue River, which forms the eastern boundary of the Reservation. Tribe’s Exhs. 7 (861), 24 (14-19). The Tribe has reserved rights to use the waters

¹ All “Tribe’s Exhibits” were submitted with the Declaration of Brian C. Gruber accompanying the Tribe’s Motion for Summary Judgment. “Tribe’s Exhs. 1 (40), 2 (47)” means Tribe’s Exhibit 1 at page 40 and Exhibit 2 at page 47.

² These include the Yellowstone River sauger, a Montana species of concern, waterfowl, bald eagles, smallmouth bass and channel catfish, among others. Tribe’s Exhs. 1 (55), 2 (55, 58, 60), 3.

of the Tongue River under a water rights compact approved by the Tribal Council and Montana Legislature in 1991 and by Congress in 1992. Pub. L. 102-374, 106 Stat. 1186; Tribe's Exhs. 6 (3-67), 37 (18-19). Tribal members beneficially use Tongue River water on the Reservation for irrigation, stockwatering, recreation and cultural uses. Tribe's Exhs. 5 (6-33 to 6-36, 7-26 to 7-28), 37 (13-17). The waters of the Tongue River also sustain native vegetation, fish and wildlife important to Northern Cheyenne subsistence, culture and ceremonies. Tribe's Exhs. 5 (7-27 to 7-28), 37 (15-17).

To further protect Reservation waters, the Tribe sought – and was approved for – “treatment as state” under the CWA. Tribe's Exh. 22. The Tribe has also adopted water quality standards and nondegradation criteria applicable to all waters within the exterior boundaries of the Reservation, including the Tongue River. *Id.* (18, D2).

III. CBM Produced Water.

A. CBM Produced Water Is a Harmful Pollutant.

CBM is a form of natural gas that is trapped in coal seams by the pressure of groundwater. Tribe's Exh. 6 (SUM-1, 3-8). To produce CBM, groundwater must be drawn off the coal seam, a process that produces copious amounts of wastewater. *Id.* (3-8 to 3-9, 4-61); *Pennaco Energy, Inc. v. Montana Bd. of Env'tl. Review*, 2008 MT 425, ¶ 9, 347 Mont. 415, ¶ 9, 199 P.3d 191, ¶ 9. Water produced

as by-product of CBM production is “salty,” as measured by its EC, and high in the relative concentration of sodium to calcium and magnesium, as measured by its SAR. *Northern Plains Resource Council v. Fidelity Exploration and Prod. Co.*, 325 F.3d 1155,1158 (9th Cir. 2003); *Pennaco*, ¶ 2 & nn.1, 2. Fidelity’s CBM water has an EC level that is approximately three to four times greater than the natural salinity of the Tongue River. Its SAR is approximately 40 to 60 times greater than the River’s background levels at the point of discharge. *Northern Plains*, 325 F.3d at 1158; *see also* Tribe’s Exh. 8 (Table 1); App. G (Att. 2).

Water with high salinity causes changes in soil structure that makes water less available to crops, while high SAR water causes soil particles to unbind and disperse, destroying soil structure and reducing or eliminating the ability of the soil to drain water. *Northern Plains*, 325 F.3d at 1158. DEQ has warned that “clayey” soil, like that in the Tongue River valley, is vulnerable to damage from high SAR water. *Id.*

Salinity can also adversely affect fish and other aquatic life. Sodium bicarbonate, one component of Fidelity’s discharges, can be toxic to fish life. The Montana Department of Fish, Wildlife and Parks (MDFWP) has testified that the sodium bicarbonate levels of Fidelity’s untreated wastewater are approximately two to three times the levels observed to kill juvenile sturgeon and fathead minnows. Tribe’s Exh. 10 (1-2).

B. Technology Is Available to Treat CBM Produced Water.

Existing technologies can ameliorate or eliminate the degradation of surface water from CBM water discharges. Treatment technologies such as ion exchange are capable of reducing SAR and EC levels in CBM water to well below the ambient levels in the Tongue River. Tribe's Exh. 13 (4); *see also* Tribe's Exh. 11 (5-8 to 5-9). Ion exchange technology is the treatment method utilized in Fidelity's Permit No. MT-0030724 at issue in this case. App. E (3-4). The cost of treating CBM water is minimal. A December 2005 study prepared by DEQ found that the average cost for advanced treatment of produced water is \$0.40/Mcf. Tribe's Exh. 16 (3, 26-27).

CBM water can also be discharged into surface impoundments where wastewater is disposed of through infiltration or evaporation. Tribe's Exh. 11 (5-39). However, surface impoundments, which are used extensively in the Powder River Basin, can have adverse impacts when they overflow or infiltrate the ground and emerge as saline seeps. Impoundments also result in adverse impacts to the land surface. *See* Tribe's Exh. 12 (6-7). Injection wells are a third type of available control technology for CBM wastewater and are "currently used by many CBM operators as a sound produced water management option." Tribe's Exh. 11 (5-16 to 5-34).

IV. State Water Quality Standards and Effluent Limitations.

A. The Board's 2003 CBM Rule.

Following a petition by NPRC, TRWUA and other interested parties, on April 25, 2003 the Board established numeric water quality standards for EC and SAR. The new rule set up a two-tier limit on ambient water quality for the Tongue River which was more restrictive during the irrigation season (March 2 through October 31) than at other times of the year. During the irrigation season, the monthly average numeric water quality standard for EC is 1000 $\mu\text{S}/\text{cm}$, and no sample may exceed an EC value of 1500 $\mu\text{S}/\text{cm}$. ARM 17.30.670(3)(a). The corresponding limits for SAR are a monthly average of 3.0 and an instantaneous maximum of 4.5. *Id.* Outside the irrigation season, the monthly average for EC is 1500 $\mu\text{S}/\text{cm}$, and no sample may exceed 2500 $\mu\text{S}/\text{cm}$. ARM 17.30.670(2)(a). The corresponding SAR values may not exceed 5.0 for the monthly average and 7.5 in any sample. *Id.*

The Board declined to classify SAR and EC as “harmful parameters,” and instead promulgated a narrative standard that declared “[c]hanges in existing surface or ground water quality with respect to EC and SAR” to be “nonsignificant” if the changes “will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity.” App. L (ARM 17.30.670(6) (2003)). The Board also adopted a “flow-

based” permitting system for CBM discharges and an unusual non-severability clause invalidating the numeric standards if either the nondegradation exemption or flow-based permitting provisions were successfully challenged. App. L (ARM 17.30.670(7), (8) (2003)); *see also* 8 Mont. Admin. Reg. 799 (Apr. 24, 2003).

B. The Board’s 2006 Rule Amendments.

On May 17, 2005, NPRC and other interested parties filed a second petition for rulemaking with the Board. The petition first asked the Board to amend the 2003 Rule to repeal the *de facto* exemption of EC and SAR from nondegradation review by classifying them as “harmful parameters.” Tribe’s Exh. 4 (2, 62-63). It also requested deletion of the flow-based permitting provisions and the nonseverability clause. *Id.* In addition, the petition asked the Board to establish uniform technology-based effluent limitation guidelines for the CBM industry requiring treatment or reinjection of all CBM produced water. *Id.* (1-2, 54-62).

At the Board’s March 23, 2006, meeting, DEQ testified in support of reclassifying SAR and EC as harmful parameters and recommended that the Board adopt the nondegradation provisions proposed in the petition. Tribe’s Exh. 20 (6). DEQ also supported deletion of the “flow-based” permitting provision and the nonseverability clause. *Id.* (7-8). The Board voted to repeal the 2003 Rule and classified SAR and EC as harmful parameters. Tribe’s Exh. 20 (6-7); App. H (10 Mont. Admin. Reg. 1247 (May 18, 2006)). Under this new standard, discharges of

SAR and EC would be “significant” and require nondegradation review under MCA 75-5-303(3) if the resulting change in the receiving waters for either parameter was greater than 10 percent of the instream water quality standards *or* the existing quality of the receiving waters was over 40 percent of the standards. ARM 17.30.715(1)(f). The Board also repealed the flow-based permitting and nonseverability provisions of the 2003 Rule. Tribe’s Exh. 20 (8).

In adopting these amendments, the Board found that classifying EC and SAR as harmful parameters was necessary “for the purpose of implementing Montana’s nondegradation policy.” App. H (1251). Explaining that “the intent of Montana’s nondegradation policy is to protect the increment of ‘high quality’ water that exists between ambient water quality and the numeric water quality standards,” the Board indicated that it had reconsidered its earlier findings and concluded that the waters of the Tongue River are “high quality” and require protection under the nondegradation policy. *Id.* (1251, 1253); *see also Pennaco*, ¶ 38 (Board’s defense of 2006 Rule was, in part, that it was “required to protect high quality waters in Montana”).

With respect to technology-based effluent limitation guidelines for the CBM industry, the Board rejected mandatory reinjection of all CBM produced water. Tribe’s Exh. 20 at 7. The Board also rejected the specific treatment guidelines proposed in the petition. *Id.*; App. H (1267). However, the Board agreed that it

had the “authority to adopt technology-based treatment requirements in the absence of federally promulgated regulations” and directed DEQ to propose such a rule at the September Board meeting. App. H (1262).

V. The Challenged MPDES Permits.

A. Fidelity’s Permit Applications.

Although Fidelity began discharging untreated CBM produced water into the Tongue River sometime in 1998, it first obtained a discharge permit from DEQ on June 16, 2000. *See Northern Plains*, 325 F.3d at 1159 n.2. MPDES Permit No. MT-0030457 allowed Fidelity to discharge up to 1600 gpm of untreated CBM produced water into 16 outfalls over a nine-mile reach of the Tongue River from the first crossing of the Wyoming/Montana border to just above the Tongue River Reservoir. Tribe’s Exh. 8 (1). On September 24, 2001, Fidelity applied for renewal of its existing MPDES permit. After DEQ administratively extended the original permit, Fidelity filed a supplemental application for permit renewal in June 2004. Tribe’s Exhs. 8, 27, 28 (56-57).

On March 11, 2004, Fidelity applied for an a second permit seeking permission to discharge 1,700 gpm of a blend of treated and untreated produced water into the Tongue River. App. F (1). The asserted purpose of the proposed permit was to assess the feasibility and costs of treating CBM produced water using ion exchange technology, which has the capability to reduce SAR and EC to

levels that are well below both Montana standards and ambient conditions in the Tongue River.³ *Id.* (3); *see also* Tribe’s Exh. 13 (4). However, Fidelity proposed to blend the treated effluent with up to 25 percent *untreated* water, which would raise the SAR and EC of the discharged water back up to the State’s water quality standards and well above ambient levels in the River. App. F (2, 3); Tribe’s Exh. 13 (2).

B. DEQ’s Permitting Actions.

DEQ released a “checklist” EA for the two permit applications on April 22, 2005. App. G. As alternatives, the EA evaluated the proposed issuance of the permits and a “no action” alternative in which the existing permit would remain in effect. *Id.* (13-14). The EA did not evaluate an alternative that would require both permits to treat all CBM produced water not put to beneficial use. The EA concluded that because issuance of the permits would comply with the State’s numeric water quality standards, the environmental impacts of the project would be “minor” and “non-significant.” *Id.* (14). DEQ never analyzed the potential for the permits to exceed the nonsignificance criteria for SAR and EC pending before the Board even though existing EC levels in the Tongue River at Decker were already over 40 percent of the monthly mean standard and existing SAR levels

³ Fidelity has been treating CBM water under Permit No. 30724 for over three years. *See* Fidelity’s Opp’n to Request for Judicial Notice at 4 (Nov. 26, 2008).

were more than 40 percent of the instantaneous maximum during several months of the year. *See* App. G (Att. 2 at 2).

At the same time it released the EA, DEQ also released draft permits. DEQ proposed to issue the permits requested by Fidelity based on a “seasonal” approach to “flow-based” permitting under which effluent limits would be set to maintain compliance with water quality standards during low flows for particular seasons. Apps. F (5), D (4), G (3). Using this approach, the total discharge under Fidelity’s existing permit would be maintained at 1,600 gpm from July through October, but allowed to increase to 2,375 gpm from March through June, and 2,500 gpm from November through February. App. D (13). The draft permits imposed no TBELs and did nothing to maintain the River’s existing water quality.

On February 3, 2006, DEQ approved the two permits without additional modifications. DEQ did so with full knowledge that the Board was likely to approve the proposed amendments to the State’s nondegradation rules at its March 23, 2006, meeting.

After the Board amended the State’s nondegradation rules, the Tribe asked DEQ to modify the permits under ARM 17.30.1365 and 17.30.1361(2)(c)(i)(B) (DEQ may modify the permit when “the board has revised, withdrawn, or modified that portion of the regulation . . . on which the permit condition was based”). DEQ

declined the Tribe's request. In light of the 60-day MEPA limitations period, the Tribe filed this litigation on April 3, 2006.

VI. Relevant EPA Actions.

The United States Environmental Protection Agency (EPA) has taken two actions of particular relevance to the challenged permits. On August 28, 2003, EPA approved the Board's 2003 Rule. App. I. On February 29, 2008, while this case was pending before the District Court, EPA approved the 2006 Rule reclassifying EC and SAR as harmful parameters for purposes of state nondegradation review. App. J.⁴

STANDARD OF REVIEW

The Supreme Court reviews a district court's grant of summary judgment de novo, and applies the same criteria applied by the district court pursuant to Mont. R. Civ. P. 56(c). *Pennaco*, ¶ 17. Here, summary judgment is appropriate because there are no material facts in dispute, and the only questions remaining for the Court are legal in nature. *See id.*

DEQ's determinations that the MPDES permits are not subject to the technology-based requirements of the CWA and WQA and that review of the authorized discharges under the Acts' antidegradation policies was unnecessary are the "agency's conclusions of law [and] are reviewed to determine if they are

⁴ The District Court referenced the 2008 letter in its Summary Judgment Order. App. A (16).

correct.” *Id.*, ¶ 18.⁵ “This same standard of review is applicable to both the district court’s review of the administrative decision and [this Court’s] subsequent review of the district court’s decision.” *Id.*

The Court should set aside an agency’s MEPA document if the record establishes that the agency acted arbitrarily, capriciously or unlawfully. *Friends of the Wild Swan v. Dep’t of Natural Resources and Conservation*, 2000 MT 209, ¶ 27, 301 Mont. 1, ¶ 27, 6 P.3d 972, ¶ 27. In making the factual inquiry concerning whether an agency decision was “arbitrary or capricious,” the reviewing court “must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.” *Id.* (quoting *North Fork Pres. Ass’n v. Dep’t of State Lands*, 238 Mont. 451, 465, 778 P.2d 862, 871 (1989)). The Court should not automatically defer to the agency’s determinations without “carefully reviewing the record and satisfying [itself] that the agency has made a reasoned decision based on its evaluation” of the relevant factors and information. *Id.*, ¶ 28 (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 378 (1989)).

⁵ The District Court appears to have applied a heightened degree of deference to DEQ’s decision on technology effluent limits. App. A (16-17, 20-21). This is an incorrect standard for deciding the legal question presented. *Pennaco*, ¶ 18.

SUMMARY OF ARGUMENT

DEQ violated the federal CWA and state WQA because it failed to impose technology-based effluent limits for the two MPDES permits issued to Fidelity. The CWA and its implementing regulations require that all discharge permits include effluent limits based on the Act's technology-forcing provisions. This requirement applies regardless of whether EPA or DEQ issues the permit or whether EPA has promulgated nationwide effluent limitation guidelines for the CBM industry. DEQ's substitution of water quality-based effluent limits for the legally mandated technology-based limits is contrary to the CWA's statutory and regulatory language and contradicts the Act's clear reliance on technology-driven discharge permits as the primary mechanism to eliminate water pollution. The permits also violate the WQA, which incorporates the CWA's minimum technology and permitting requirements.

The permits violate the antidegradation polices included in the CWA, WQA and their implementing regulations. Both permits authorize Fidelity to discharge substantial amounts of untreated CBM water into the high quality waters of the Tongue River, greatly increasing the levels of EC and SAR. This clear degradation of the River's water *quality*, regardless of the effect on its designated *uses*, without undertaking the required nondegradation review process violates federal and state law.

DEQ violated MEPA by not evaluating reasonable alternatives to the discharge of untreated CBM water. DEQ was required to consider such alternatives as treatment, injection and discharge into surface impoundments in the EA because they are reasonable and fall squarely within the agency's obligation to develop TBELs on a case-by-case basis for the permits. DEQ also failed to conduct a meaningful analysis of the impacts of the no action alternative, *i.e.* denial of the permits.

ARGUMENT

I. Legal Background – the Clean Water Act.

Congress enacted the CWA in 1972 in order to “restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” 33 U.S.C. § 1251(a). The ultimate goal of the CWA is to “eliminate[.]” the “discharge of pollutants into the navigable waters.” *Id.* § 1251(a)(1). To achieve this goal, the Act prohibits the discharge of any pollutant from a point source into the waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. *Id.* §§ 1311(a), 1342(a).

Congress also authorized states to administer the CWA's NPDES permit program, as long as state law meets all of the Act's requirements. *Id.* § 1342(b)(1)(A); *see also* 40 C.F.R. § 123.25; ARM 17.30.1303(2) (describing “requirement of equivalence with the federal permit system”). The EPA has

delegated authority to Montana to implement the CWA, and DEQ administers the NPDES permit program through issuance of MPDES permits. ARM 17.30.1301, .1303. An MPDES permit may not be issued unless it provides for compliance with all applicable CWA requirements. ARM 17.30.1311(1).

In addition to the NPDES requirement, the CWA provides for two types of standards to control water pollution: (1) *effluent limitations*, which impose technology-based requirements on point source discharges, 33 U.S.C. § 1311(b); and (2) *water quality standards*, which focus on protecting the quality of the receiving waters, *id.* § 1313. These two types of standards are separate and distinct – technology-based effluent limitations apply regardless of the quality or capacity of the receiving waters to assimilate pollutants. *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1041-42 (D.C. Cir. 1978); *Bethlehem Steel Corp. v. EPA*, 538 F.2d 513, 514-15 (2d Cir. 1976); *see also* U.S. EPA NPDES Permit Writers’ Manual (Dec. 1996)⁶ at 4 (“Wastewater must be treated with the best treatment technology economically achievable – regardless of the condition of the receiving water.”). NPDES permits must incorporate provisions that ensure compliance with *both*

⁶ EPA’s NPDES Permit Writers’ Manual is available online at <http://www.epa.gov/npdes/pubs/owm0243.pdf>. The Tribe submitted excerpts of the Manual to the District Court in its April 17, 2007, Notice of Second Supplemental Authority. The Manual has been cited by courts as evidence of EPA’s understanding of NPDES permit requirements. *See Amer. Canoe Ass’n, Inc. v. Dist. of Columbia Water and Sewer Auth.*, 306 F. Supp. 2d 30, 46 (D.D.C. 2004).

technology-based effluent limitations and water quality standards. *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 704 (1994).

A. Technology-Based Effluent Limitations.

When Congress amended the existing federal water law in 1972, it established TBELs as the fundamental mechanism for eliminating pollutant discharges. This sea change in the federal water pollution control program shifted the enforcement focus from water quality standards to effluent limits, which were seen as the “best available mechanism to control water pollution.” S. Rep. No. 92-414, at 7-8 (1971), 1972 U.S.C.C.A.N. 3668, 3675. The goal of the Act “was to be accomplished through ambitious technological improvements, because the previous water-quality based approach to pollutant control had been ‘limited in its success.’” *Our Children’s Earth Found. v. EPA*, 527 F.3d 842, 847-48 (9th Cir. 2008) (quoting *id.*). The necessary link between imposing effluent limits through NPDES permits and reliance on technology is manifest in the structure of the Act. *See* 1972 U.S.C.C.A.N. at 3675 (“With effluent limits, the Administrator can require the best control technology; he need not search for a precise link between pollution and water quality.”).

TBELs are designed to force the development and implementation of increasingly more effective pollution control technology. *Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 184-85 (2d Cir. 2004). By 1989, existing discharge sources

were required to meet the “best available technology economically achievable,” or BAT. 33 U.S.C. § 1311(b)(2). BAT is “based on the performance of the single best-performing plant in an industrial field,” *Chemical Mfrs. Ass’n v. EPA*, 870 F.2d 177, 226 (5th Cir. 1989), and is intended to “push[] industries toward the goal of zero discharge as quickly as possible,” *Kennecott v. EPA*, 780 F.2d 445, 448 (4th Cir. 1985). In contrast, new sources of pollution are required to use a higher level of technology, the “best available demonstrated control technology,” or BADCT. 33 U.S.C. § 1316(a)(1). The BADCT standard requires the greatest degree of effluent reduction technologically feasible, including, “where practicable, a standard permitting no discharge of pollutants.” *Id.*; *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 120-21 (1977).

TBELs can be established in either of two ways. First, EPA may promulgate ELGs applicable to a class of industry. 33 U.S.C. § 1314(b); 40 C.F.R. § 125.3(c)(1). In the absence of uniform guidelines, EPA (or a state administering the NPDES permit program) must incorporate TBELs on a case-by-case basis using the permit writer’s “best professional judgment” (BPJ). 33 U.S.C. § 1342(a)(1)(B); 40 C.F.R. § 125.3(c)(2). Montana’s water pollution control regulations incorporate these federal requirements by reference. *See* ARM 17.30.1344, .1345, .1361; *see also* ARM 17.30.1303(3)(a) (explaining that for

incorporated federal regulations, references to the EPA Administrator “should be read to mean [DEQ]”).

B. Water Quality Standards.

Section 303 of the CWA requires states to adopt and enforce comprehensive water quality standards. 33 U.S.C. §§ 1311(b)(1)(C), 1313. Given the primacy of TBELs as a pollution control mechanism, water quality standards provide a *supplemental* basis for controlling pollution and are used to develop effluent limits only where the level of control required by TBELs is *insufficient* to meet applicable water quality standards. *PUD No. 1*, 511 U.S. at 704 (water quality standards provide “a supplementary basis . . . so that numerous point sources, despite individual compliance with effluent limitations” do not cause overall water quality to fall “below acceptable levels”); *Columbus & Franklin County Metro. Park Dist. v. Shank*, 600 N.E.2d 1042, 1070 (Ohio 1992); U.S. EPA NPDES Permit Writers’ Manual at 87, 101.

A 1987 amendment to the CWA clarified that Section 303 contains an “antidegradation policy” requiring that water quality standards be sufficient to prevent further degradation of water quality. *Id.* § 1313(d)(4); *see also PUD No. 1*, 511 U.S. at 705. EPA’s regulations require states to “develop and adopt a statewide antidegradation policy.” 40 C.F.R. § 131.12(a). Where the quality of the waters is better than levels necessary to support existing uses, the regulations

require maintenance and protection of these high quality waters. *Id.* § 131.12(a)(2). States may not permit degradation of high quality waters unless the state finds that “allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.” *Id.* Even if a state chooses to allow degradation for these reasons, it must still protect existing uses and “assure” that “the highest statutory and regulatory requirements for all new and existing point sources” will be applied. *Id.*

Montana implements the EPA’s antidegradation policy through the WQA’s nondegradation policy, MCA 75-5-303. DEQ may only authorize a “significant” change in water quality through the WQA’s intensive nondegradation review process. MCA 75-5-303(3)(a), (d).

II. DEQ’s Issuance of the Permits Violated both the CWA and WQA.

Both the CWA and WQA require DEQ to include TBELs in discharge permits. The CWA and WQA also require Montana to conduct a thorough review of the rationale for and alternatives to degradation of high quality waters before authorizing discharges that would degrade water quality. DEQ violated both of these requirements by authorizing Fidelity to discharge untreated CBM wastewater into the Tongue River. Neither of the permits required Fidelity to apply BAT or BADCT to reduce SAR and EC. They also incorporate now-defunct, unlawful

regulatory standards that impermissibly exempt CBM discharges from nondegradation review.

A. The Permits Fail to Impose TBELs.

1. DEQ Failed to Include TBELs in Fidelity’s Permits.

A fundamental premise of pollution control under the CWA is that discharge permits issued by EPA or a state that has been delegated permitting authority, must limit the pollutants that may be discharged into navigable waters. BAT “shall be applied to all [existing] point sources of discharge of pollutants” in accordance with the Act’s requirements. 33 U.S.C. § 1311(e); *see also* 33 U.S.C. § 1311(b)(2); 40 C.F.R. § 125.3(a)(2)(v). EPA regulations similarly provide that “[t]echnology-based treatment requirements under [33 U.S.C. § 1311(b)] represent the *minimum level of control that must be imposed* in a permit issued under [33 U.S.C. § 1342].” 40 C.F.R. § 125.3(a) (emphasis added).

“Technology-based treatment requirements” may be imposed through “[a]pplication of EPA-promulgated [ELGs],” 40 C.F.R. § 125.3(c)(1), or, if no ELGs exist for the class of pollutants, “[o]n a case-by-case basis under section 402(a)(1) of the Act” using the permit writer’s BPJ and the standards in 40 C.F.R. § 125.3(d). *Id.* § 125.3(c)(2). As explained by the Fifth Circuit:

In situations where the EPA has not yet promulgated any [ELG] for the point source category or subcategory, NPDES permits must incorporate “such conditions as the Administrator determines are necessary to carry out the provisions of the Act.” 33 U.S.C. §

1342(a)(1). In practice, this means that the EPA must determine on a case-by-case basis what effluent limitations represent the BAT level, using its “best professional judgment.” 40 C.F.R. § 125.3(c)-(d). Individual judgments thus take the place of uniform national guidelines, but the technology-based standard remains the same.

Texas Oil and Gas Ass’n v. EPA, 161 F.3d 923, 928-29 (5th Cir. 1998). (internal citation omitted).

Because DEQ administers the NPDES permit program, the agency acts in the same capacity as EPA when it issues permits and must faithfully carry out all of the CWA’s requirements. 40 C.F.R. § 123.25(15) (state permit programs “must be administered in conformance with . . . 40 C.F.R. § 122.44”); *see also* ARM 17.30.1303(1)-(3). Section 122.44 of the federal regulations requires that “*each* NPDES permit *shall include* conditions meeting the following requirements when applicable.” (emphasis added) These requirements include EPA-promulgated ELGs, Section 306 new source performance standards, “case-by-case effluent limitations,” or a combination of the three. 40 C.F.R. § 122.44(a)(1). Section 125.3(c) lays out the factors that must be considered when developing case-by-case effluent limitations and provides that such factors “must be considered *in all cases, regardless of whether the permit is being issued by EPA or an approved State.*” 40 C.F.R. § 125.3(c)(2) (comment) (emphasis added). In short:

States issuing permits pursuant to § 1342(b) stand in the shoes of the agency, and thus must similarly pay heed to § 1311(b)'s technology-based standards when exercising their BPJ. Thus . . . *States are*

required to compel adherence to the Act's technology-based standards regardless of whether EPA has specified their content [in ELGs].

Natural Resources Def. Council, Inc. v. EPA, 859 F.2d 156, 183 (D.C. Cir. 1988) (emphasis added); *see also* ARM 17.30.1303(3)(a).

Montana law requires that all MPDES permits must provide for compliance with all applicable requirements of the CWA. ARM 17.30.1311(1). In particular, regulations promulgated under the WQA require DEQ to impose TBELs in all discharge permits. ARM 17.30.1344, .1345, .1361 (expressly incorporating 40 C.F.R. §§ 122.44, 125.3).

DEQ simply disregarded these requirements when it issued permits to Fidelity without applying BAT or BADCT to the discharges on a case-by-case basis using its BPJ. Permit MT-0030457, which authorizes Fidelity to discharge up to a total of 2500 gpm of untreated CBM wastewater, contains no effluent limitations on SAR, EC or other parameters, much less limitations that require the application of BAT. App. C (7-8). Indeed, DEQ freely admits that it has “decline[ed] to develop and require TBELs for all parameters of concern using [its BPJ].” Tribe’s Exh. 32 (5-6).

Similarly, Permit MT-0030724 fails to impose any TBELs on SAR, EC or other parameters present in CBM water, much less the BADCT required for new sources under Section 306(a) of the CWA. While this permit contemplates that Fidelity will treat a portion of the effluent with an ion exchange process, it

authorizes Fidelity to blend the water it has treated with untreated wastewater as long as the combined effluent does not exceed the Tongue River's seasonal instream standards. In effect, the permit allows Fidelity to treat its CBM water to remove harmful pollutants and then use the treated water to dilute untreated wastewater before discharging it into the River.⁷ Fidelity may thus discharge CBM water with SAR and EC levels as high as the instream numeric standards, even though the treatment process used to remove pollutants from *some* of the wastewater could improve the quality of *all* of the discharge far beyond the applicable numeric standards. This is hardly the BADCT required by the CWA. 33 U.S.C. § 1316(a)(1); *Train*, 430 U.S. at 120-21.

In sum, because neither permit satisfies applicable federal and state law requiring DEQ to include TBELs limiting the discharge of SAR, EC and other pollutants, the permits are unlawful and should be set aside.

2. The District Court Erred in Holding that DEQ Was not Required to Include TBELs in Fidelity's Permits.

From the start of the permitting process, DEQ maintained that “developing BPJ under § 402(a)(1) of the CWA is not applicable, because that section of the

⁷ This is another violation of the Clean Water Act, as dilution cannot be substituted for treatment. *See United States v. Iron Mountain Mines, Inc.*, 987 F. Supp. 1263, 1270 n.14 (E.D. Cal. 1989) (quoting 40 C.F.R. § 403.6(d)); *see also* Van Putten & Jackson, *The Dilution of the Clean Water Act*, 19 Mich. J. L. Ref. 868, 880 (1986) (“Dilution in the nation's waters was rejected [by Congress in 1972] as an acceptable means of waste disposal.”).

CWA authorizes EPA, not the states, to develop case-by-case permit limits.”

Tribe’s Exh. 32 (5).

The District Court agreed with DEQ, holding that the CWA only gives EPA discretionary authority to impose TBELs. App. A (18). The court reasoned that the plain language of the statute and applicable case law does not require DEQ to impose treatment on a case-by-case basis in the absence of federally promulgated ELGs for the CBM industry. *Id.* The court also agreed with an argument DEQ first made after issuing the permits, that TBELs were not necessary because DEQ was protecting water quality by imposing “more stringent” WQBELs. *Id.* (20-21).

The Court’s – and DEQ’s – reasoning does not hold water for several reasons. First, while it is true that 33 U.S.C. § 1342(a)(1) applies to NPDES permits issued by the EPA Administrator, when a state administers the NPDES permit program – as Montana does – it “[s]tands in the shoes of the Administrator” and must therefore “pay heed” to the technology-based standards required by the Act and exercise its [BPJ] to determine case-by-case effluent limits when standards have not been promulgated for an industrial category. *Natural Resources Def. Council*, 859 F.2d at 183. Thus, just as EPA is “required to adhere to the technology-based standards set out in § 1311(b)” even if it has not established formal ELGs, DEQ may not ignore the identical obligation and – as it did here – issue permits devoid of TBELs. *Id.* (emphasis in original); *see also Shank*, 600

N.E.2d at 1060-61. EPA has confirmed this interpretation of the CWA specifically for discharge permits issued to the CBM industry. In the Technical Support Document for the 2006 Effluent Guidelines Program Plan, EPA stated that because CBM discharges are “not subject to an existing ELG, permit writers must develop [TBELs] on a case-by-case basis using their BPJ.” App. M (6-3) (citing 40 C.F.R. §§ 122.44(a)(1), 125.3(d)).

Indeed, the entire structure of the CWA presumes that states, when issuing discharge permits under authority delegated by the EPA under Section 402(b), will adhere to the same minimum standards as EPA when issuing such permits. 33 U.S.C. § 1342(a)(3); 40 C.F.R. § 123.25; ARM 17.30.1303(1)-(2). While states may impose *more* stringent requirements than mandated by the CWA and its implementing regulations, they may not fall below the federally established floor. 33 U.S.C. § 1370; *see also Northern Plains*, 325 F.3d at 1164; *Shank*, 600 N.E.2d at 1070.

The District Court never examined the CWA’s structure, its emphasis on technology-driven effluent limits or the need for states to develop such limits on a case-by-case basis in the absence of federal ELGs. Indeed, the court’s holding is inimical to the Act’s fundamental requirement that existing sources meet the BAT standard and all new sources attain BADCT. 33 U.S.C. §§ 1311(b)(2), 1316(a)(1). In an economy as specialized and diverse as that of the United States, it is simply

not reasonable to expect that federal ELGs will precisely cover every class of pollutant source. If all 47 NPDES-authorized states could simply ignore the CWA's technology requirements in cases that were not fully covered by EPA guidelines, numerous sources that happened to fall outside EPA's industry-specific regulations (such as the rapidly growing CBM industry) could avoid technology-based requirements altogether.

The court was also wrong to rely on the "when applicable" language of Section 122.44 to excuse DEQ from imposing TBELs. App. A (19) ("no basis for establishing effluent limitations under [Section 122.44(a)(1)] applies"). The phrase "when applicable" in 40 C.F.R. § 122.44 was added, not to excuse permit writers from requiring technology-based requirements in the absence of a federal ELG, but simply because the rest of Section 122.44 provides an extensive list of legal requirements not all of which are applicable to every permit. Significantly, Section 122.44(a)(1) provides that such limitations must be applied "in accordance with § 125.3 of this chapter." 40 C.F.R. § 122.44(a)(1). Section 125.3(c), in turn, makes clear that *all* NPDES permits must contain technology-based requirements and that such requirements must be imposed based on existing ELGs for the industry or on the permit writer's BPJ. The intent to include states in the BPJ requirement is clear. *Id.* § 125.3(c)(2) (comment). The District Court simply erred in reading these inter-related regulations, as it did in interpreting the structure and

intent of the CWA. Indeed, the court failed even to mention 40 C.F.R. § 125.3, which mandates TBELs in all NPDES permits. *See* App. A (17-22).

The District Court’s reliance on “more stringent” WQBELs as a basis for compliance with the CWA is without merit because it is inconsistent with the history and structure of the CWA. As explained above, in enacting the 1972 amendments Congress clearly made technology the cornerstone of the CWA’s new approach to pollution control: “Central to [the CWA and its amendments] is the notion that pollution discharges would be controlled through technology-based effluent limitations.” *Our Children’s Earth Found.*, 527 F.3d at 844. Under the amended CWA, water quality standards are only used to develop effluent limits where the application of TBELs is insufficient to meet water quality standards. *Shank*, 600 N.E.2d at 1070; U.S. EPA NPDES Permit Writers’ Manual at 87, 101. Thus, technology-based requirements are “independent” from permit limits developed from water quality standards, and such TBELs “constitute the minimum level of effluent reduction required.” *Shank*, 600 N.E.2d at 1070 (citing *Van Putten & Jackson*, 19 Mich. J. L. Ref. at 863).

DEQ’s reliance on WQBELs as a *first* measure of protection – without any attempt to develop TBELs – fails to comprehend the hierarchy of technology-driven effluent limits and water quality standards in the structure of the CWA. Moreover, it directly contradicts EPA’s guidance to permit writers. In the NPDES

Permit Writers' Manual, EPA explains that "the process used to develop the limits and conditions, and issue the permit, generally follows a common set of steps."

U.S. EPA NPDES Permit Writers' Manual at 23 (§ 3.3). Following receipt of an application, the permit writer develops effluent limits for the permit as follows:

The *first* major step in the permit development process is the derivation of technology-based effluent limits. *Following this step*, the permit writer derives effluent limits that are protective of State water quality standards (i.e., water quality-based effluent limits (WQBEL)). *The permit writer then compares the technology-based limits with the WQBELs and applies the more stringent limits in the NPDES permit.*

Id. at 24 (emphasis added). EPA's exhibit illustrating the NPDES permit development process also emphasizes that the permit writer first develops TBELs, *then* moves on to WQBELs and, critically, compares the two for each pollutant, ultimately imposing the more stringent limit. *Id.* at 25 (Exhibit 3-2). Thus, DEQ's initial resort to WQBELs without developing (or comparing) technology-based limits is unsupportable under the structure of the amended CWA and EPA's guidance to all permit writers.

Finally, the District Court incorrectly relied on *Train*, 430 U.S. at 120, to support its conclusion that "there is no mandatory duty to develop [TBELs] using BPJ." App. A (19); *see also* Tribe's Exh. 31 (6) (DEQ reliance on *Train* in response to comments). In *Train*, however, the U.S. Supreme Court upheld EPA's authority to promulgate industry-wide ELGs under Section 301 of the CWA. Further, in rejecting the petitioner's argument, the Court's holding presumed that

until EPA issued such industry-wide guidelines, permit writers would continue to implement the Act's required TBELs on a case-by-case basis. *Id.* at 131-32 & n.23. Indeed, the approach of using BPJ to fill gaps in the ELGs is now thoroughly entrenched both in EPA's regulations, 40 C.F.R. § 125.3(c), and judicial decisions, *see, e.g., Texas Oil and Gas*, 161 F.3d at 928-29; *Natural Resources Def. Council*, 859 F.2d at 183; *Shank*, 600 N.E.2d at 1061.

B. The Permits Violate the CWA's and WQA's Nondegradation Policies.

“Where the quality of the waters *exceed* levels necessary to support propagation of fish, shellfish, and wildlife and recreation,” EPA regulations mandate that state antidegradation (or nondegradation) policies protect and maintain such higher water quality unless the state authorizes the degradation after applying the rigorous nondegradation review process. 40 C.F. R. § 131.12(a)(2). Even if a state decides to allow degradation of water quality, it must still fully protect existing uses and require the “highest statutory and regulatory requirements for all new and existing point sources.” *Id.*

There is no dispute that the quality of the waters of the Tongue River currently surpasses the State's water quality standards for SAR and EC. By allowing the discharge of untreated CBM wastewater, DEQ has authorized Fidelity to lower the quality of the water for SAR, EC and other pollutants. DEQ's analysis for the permits plainly demonstrates this, as Permit No. 30457 will increase SAR

ambient levels from between 158 and 228 percent, and Permit No. 30724 by as much as 51 percent. *See* App. F (App. V); App. D (App. V). Moreover, under Montana’s *current* classification of EC and SAR as harmful parameters, the permitted discharge levels would exceed the numerical nonsignificance criteria because the Tongue River’s ambient EC level is above 40 percent of the seasonal standard. *See id.* In addition, the change in SAR levels under Permit No. 30457 is greater than 10 percent of the seasonal standard. *See id.* DEQ cannot seriously argue that permits which collectively allow ambient levels of SAR in the Tongue River to *double or triple*, or which clearly exceed the Board’s current standard for determining significance, will not cause significant degradation of water quality in the Tongue River.

The District Court’s Order upholding the permits erred in holding that they did not violate either federal or state nondegradation policies. App. A (22-25). The court was also wrong in determining that DEQ had no discretion to disregard the unlawful 2003 Rule when it issued the permits. *Id.*

The Fidelity permits violate the CWA because they authorize Fidelity to degrade the waters of the Tongue River without undertaking the rigorous nondegradation review required by 40 C.F.R. § 131.12(a)(2). DEQ’s issuance of the permits also failed to ensure that the “highest statutory and regulatory requirements for all new and existing point sources” – BADCT for new sources

and BAT for existing sources – would be required. *Id.*; *see Shank*, 600 N.E.2d at 1059-60. As discussed above, DEQ failed to impose *any* TBELs on the discharge of raw CBM produced water.

The 2003 Rule, which has continuing effect by its inclusion in the permits, also conflicts with federal law because it allows increases in SAR and EC to degrade the *quality* of high quality waters without nondegradation review as long as designated *uses* are not impaired. The now-defunct regulation authorized the discharge of CBM water up to the instream water quality standards for SAR and EC provided that no measurable effects on any existing or anticipated use were observed. App. L. Thus, the 2003 Rule essentially reduced the protection afforded to high quality waters under 40 C.F.R. § 131.12(a)(2) to the level of protection afforded to lower quality waters under Section 131.12(a)(1) because it merely purported to protect water *uses*, not water *quality*. The state regulation was therefore a *prima facie* violation of the CWA.

This point is illustrated by the Ohio Supreme Court's decision in *Shank*, 600 N.E.2d 1042. *Shank* involved challenges to NPDES permits issued by the Ohio EPA allowing discharges into a high quality stream. *Id.* at 1046-47. The Ohio EPA argued that the permits were lawful because a state regulation allegedly allowed changes in water quality unless such changes interfered with designated uses or caused exceedances of numerical water quality standards. *Id.* at 1056. The

court set aside the permits, holding that the Ohio EPA’s “interpretation [of the Ohio regulation] conflicts with federal law.” *Id.* at 1054. The court reasoned that “this interpretation . . . would eviscerate the rule *because it allows a clear degradation of water quality to be considered nondegradation.*” *Id.* at 1056 (emphasis added). The interpretation was also unlawful because it “render[ed] meaningless the requirement that degradation be allowed only after” the rigorous nondegradation review process. *Id.*

DEQ’s failure to apply the federal antidegradation policy is not excused by Montana’s now-repealed 2003 Rule. As in the Ohio EPA’s interpretation of the antidegradation policy in *Shank*, Montana’s protection of water uses rather than water quality conflicted with federal law and was therefore *ultra vires* and unlawful. Because ambient water quality in the Tongue River is currently at less than half of the instream numeric limit for EC and SAR, the 2003 Rule effectively authorizes substantial degradation of high quality waters without the antidegradation review or the strict regulatory requirements mandated by the CWA. *See* 40 C.F.R. § 131.12.⁸

⁸ DEQ’s exemption of the Fidelity permits from nondegradation review is also unlawful as an abuse of discretion because, although the agency was actively supporting the pending petition to reclassify SAR and EC, it still issued a five-year permit under regulatory standards that conflicted with federal law and that it knew were likely to soon be repealed. Tribe’s Exh. 20 (6). DEQ further abused its discretion by not modifying the permit – as the Tribe requested – to reflect the

In the face of the Board’s 2006 rule amendment, the District Court’s holding that former ARM 17.30.670(6) is consistent with Montana’s nondegradation policy is at odds with even the Board’s understanding of the policy. App. A (24). When it repealed the 2003 Rule the Board recognized that classifying EC and SAR as harmful parameters was necessary “for the purpose of implementing Montana’s nondegradation policy.” App. H (1251). The Board further explained that “the intent of Montana’s nondegradation policy is to protect the increment of ‘high quality’ water that exists between ambient water quality and the numeric water quality standards.” *Id.* In short, the Board recognized that the 2003 Rule failed to protect the “increment of ‘high quality’ water” as required by state and federal law. Thus, the Board’s justification for adopting the 2006 Rule is an acknowledgment of the 2003 Rule’s legal shortcomings. *See also* Tribe’s Exh. 19 (4) (Board initiated rulemaking because the 2003 Rule “effectively exempts methane discharges . . . from the State of Montana’s nondegradation policy”).

The court’s holding that DEQ was required to apply the 2003 Rule as current state law when it issued the permits is incorrect because it ignores controlling federal law in the area of water pollution control. Under the supremacy clause of the United States Constitution, DEQ is obligated to comply with federal law when it is in direct conflict with state law. *Northern Plains*, 325 F.3d at 1165. The

2006 Rule, adopted a mere two months after the permit issuance. *See* ARM 17.30.1365, .1361(2)(c)(i)(B).

court's reliance on *Merlin Meyers Revocable Trust v. Yellowstone County*, 2002 MT 201, 311 Mont. 194, 53 P.2d 1268, is unavailing because *Merlin Meyers* did not address a situation where, as here, a state regulation is directly contrary to *binding federal law*. App. A (23). Under these circumstances, the supremacy clause requires compliance with the CWA's regulations.

Even if DEQ were obligated to follow state law, *this Court* is obligated to apply controlling federal law where it conflicts with state law. *State ex rel. Greeley v. Confederated Salish and Kootenai Tribes of the Flathead Reservation*, 219 Mont. 76, 99, 712 P.2d 754, 768 (1985) (quoting *San Carlos Apache Tribe v. Arizona*, 463 U.S. 545, 571 (1983)) (state courts "have a solemn obligation to follow federal law," particularly "when federal law conflicts with state law").

Finally, it is immaterial that EPA approved the 2003 Rule since only Congress can amend the CWA and EPA has no power to approve state regulations that are less stringent than required by federal law. *See Northern Plains*, 325 F.3d at 1164; *American Mining Cong. v. EPA*, 965 F.2d 759, 772 (9th Cir. 1992); *Natural Resources Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1374, 1377 (D.C. Cir. 1977); *Natural Resources Def. Council v. EPA*, 902 F.2d 962 (D.C. Cir. 1990) ("It hardly bears noting that EPA's discretion cannot include the power to rewrite a statute and reshape a policy judgment Congress itself has made.").

III. DEQ's Issuance of the Permits Violated MEPA.

A. The Montana Environmental Policy Act.

MEPA requires Montana agencies to take a “hard look” at the environmental consequences of proposed state actions by requiring agencies to prepare a detailed environmental impact statement (EIS) for all “major actions of state government significantly affecting the quality of the human environment.” MCA 75-1-201(1)(b)(iv); *Ravalli County Fish and Game Ass'n v. Montana Dep't of State Lands*, 273 Mont. 371, 377, 903 P.2d 1362, 1367 (1995). Additionally, for “any proposal that involves unresolved conflicts concerning alternative uses of available resources,” state agencies must “study, develop, and describe appropriate alternatives to recommend[ed] courses of action.” MCA 75-1-201(1)(b)(v).

Consideration of alternatives is the “heart” of the environmental review process, and “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” *Sagebrush Rebellion, Inc. v. Hodel*, 790 F.2d 760, 768 (9th Cir. 1986) (quoting 40 C.F.R. § 1502.14).⁹ An agency must look at every reasonable alternative within the range dictated by the project's purpose and need that “is sufficient to permit a

⁹ Montana courts look to federal cases applying the National Environmental Policy Act for guidance on MEPA's requirements. *Ravalli County*, 273 Mont. at 377, 903 P.2d at 1366.

reasoned choice.” *Alaska Wilderness Recreation and Tourism Ass’n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995). The duty to examine alternatives applies even where the environmental consequences of the proposed actions require preparation of an EA rather than an EIS. ARM 17.4.607(2)(b), .609(3)(f); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-29 (9th Cir. 1988).

MEPA defines an “alternative” as an “alternative approach or course of action that would appreciably accomplish the same objectives or results as the proposed action.” ARM 17.4.603(2)(a)(i). It includes “no action or denial.” ARM 17.4.603(2)(a)(iii). The alternatives to be considered must be “achievable under current technology and . . . economically feasible” MCA 75-1-201(1)(b)(iv)(C)(I); *see also* ARM 17.4.603(2)(b) (agency must consider alternatives that are “realistic, technologically available, and that represent a course of action that bears a logical relationship to the proposal being evaluated”).

In addition to evaluating alternative actions, the agency must “complete a meaningful no-action alternative analysis,” which includes the “projected beneficial and adverse environmental, social, and economic impact of the project’s noncompletion.” MCA 75-1-201(1)(b)(iv)(C)(IV).

B. DEQ Failed to Evaluate Alternative Water Management Options.

DEQ considered only two alternatives in the checklist EA: (1) the proposed action (as modified by DEQ), and (2) a so-called “no action” alternative. App. G

(13-14). The EA evaluated no water treatment or management options other than those provided for in the proposed action. In particular, DEQ failed to examine an alternative that would have required treatment of all produced water not put to beneficial use, *i.e.* all discharged water. DEQ also failed to evaluate the use of injection and surface impoundments as an alternative to direct discharge of CBM water.

DEQ's failure to carefully consider these alternatives is inexplicable because at the very time DEQ issued the permits, the Board was reviewing the technological and economic feasibility of a range of options for treatment and management of CBM water, including various forms of treatment and underground injection. *See, e.g.*, Tribe's Exhs. 20 (6-8), 8, 11. The EA failed to evaluate any of the information generated in the Board's concurrent rulemaking regarding alternative water management techniques.

The District Court erred in concluding that these alternatives were not "reasonably available" and therefore not required to be considered by DEQ. App. A (27-34). First, the court's opinion was based on the incorrect conclusion that DEQ "lacks authority" to impose TBELs on a case-by-case basis. *Id.* (33-34). As discussed above, DEQ does have this authority and is *required* to impose TBELs in CBM discharge permits. *See* Part II.A, *supra*. Moreover, the requirement that DEQ apply BPJ to individual permits is entirely independent of the Board's

authority to determine effluent guidelines *for a particular industry*. App. A (34) (citing MCA 75-5-305(1)).

The court also erred in concluding that “none of the options promoted by the Tribe advance the purpose of the proposal being considered by DEQ – *i.e.* the discharge of CBM water into the Tongue River pursuant to rules implementing the MPDES program.” App. A (32). Inclusion of TBELs requiring treatment not only “advance[s] the purpose” of Fidelity’s permit application, it is required by the CWA and WQA. Injection and surface impoundment are other technology-based limitations on effluent that fall within DEQ’s authority to conform MPDES permits to the CWA’s requirements. Indeed, the EA includes a brief (and inadequate) mention of surface impoundments, but only in the no action analysis. App. G (13).

Finally, the court wrongly rejected the Tribe’s proposed alternatives, finding that “DEQ had no authority to impose [other water management] alternatives” in light of BLM’s and BOGC’s approval of Fidelity’s CBM development projects. App. A (33). However, as the agency that administers the NPDES program, DEQ must oversee compliance with applicable provisions of the CWA, including its technology-forcing mandates. Consequently, BLM and BOGC cannot, through their approval of Fidelity’s plans of development and associated water management plans, dictate the alternatives DEQ must consider in managing the discharge of CBM water. On the contrary, the record indicates that BLM is relying

upon DEQ to protect water quality by issuing permits in compliance with the CWA and WQA. DEQ SJ Mot., Exh. 16 (3).

C. DEQ’s Analysis of the No Action Alternative Was Inadequate.

In preparing an EA, a state agency must “complete a meaningful no-action alternative analysis” when it is “determined by the agency to be necessary.” MCA 75-1-201(1)(b)(iv)(C)(IV), -201(1)(b)(i)(B). Here, DEQ failed to meaningfully analyze a legitimate no action alternative because the EA only evaluated an administrative extension of Fidelity’s existing permit, thereby allowing ongoing discharge of up to 1600 gpm of untreated CBM water. App. G (13). Analysis of continued discharge as a “no-action” alternative does not comply with MEPA, which requires DEQ to analyze the impacts of the “*project’s noncompletion.*” MCA 75-1-201(1)(b)(iv)(C)(IV) (emphasis added). Indeed, MEPA regulations equate the “no action” alternative to a “denial.” ARM 17.4.603(2)(a)(iii).

In addition, under MCA 75-1-201(1)(b)(v), DEQ was required to evaluate a no action alternative because Fidelity’s proposal “involve[d] unresolved conflicts concerning alternative uses of available resources.” This MEPA provision, in contrast to MCA 75-1-201(1)(b)(i)(B), contains no EA exemption from the alternatives requirement and is applicable to Fidelity’s permits because they inherently involve conflicting approaches to disposal of CBM water.

The District Court incorrectly concluded that the EA was not required to examine a true no action alternative. App. A (35). MEPA requires an EA to consider reasonable alternatives, including the no action alternative. ARM 17.4.609(3)(f); ARM 17.4.603(2)(a)(iii). Furthermore, by inclusion of the no action alternative in this case, DEQ implicitly “determined” that evaluation of a no action alternative was “necessary.” MCA 75-1-201(1)(b)(i)(B). Indeed, the no action alternative was “necessary” because without it, the EA would have only analyzed the proposed action as modified by the agency. DEQ cannot seriously contend that analyzing a single alternative would have complied with MEPA.

The court also applied an unduly restrictive interpretation of DEQ’s broad discretion under state law to deny Fidelity’s permit application. App. A (36) (citing ARM 17.30.1363). However, the court failed to recognize that DEQ is never required to accept an application if it does not comply with the CWA’s technology requirements. *See* ARM 17.30.1322(17)(f) (regulation governing permit applications incorporates federal regulations regarding TBELs), .1303(2) (CWA’s “requirement of equivalence”). Furthermore, ARM 17.30.1363 only applies to renewal applications, so it does not control DEQ’s decision on Permit No. 30724. Finally, the CWA requires that states administering the NPDES program have authority to reject permit applications if they do not comply with federal standards. *See* 33 U.S.C. § 1342(b)(1)(A); 40 C.F.R. § 123.25; ARM

17.30.1303(1)-(3). In short, DEQ does have broad authority to deny permits and therefore should have analyzed their denial – the true no action alternative – in the EA.

Finally, the court never considered the merits of DEQ’s one-paragraph no-action analysis, which did not seriously evaluate the “projected beneficial and adverse” impacts of a denial of Fidelity’s application for a *new* permit. MCA 75-1-201(1)(b)(iv)(C)(IV). The EA merely indicates that if the application for a new permit is denied, produced water “would need to be impounded away from state waters.” App. G (13). However, the EA’s comparison of the effects of the proposed action and the no action alternative is limited to one sentence. *Id.* (14). This analysis is plainly inadequate and violates DEQ’s obligation to comply with MEPA’s procedures to the “fullest extent possible.” MCA 75-1-201; ARM 17.4.601, .602.

In sum, the checklist EA prepared by DEQ to justify the permitting decisions was legally inadequate because it failed to evaluate reasonable alternatives to the proposed discharges and did not include a thorough analysis of the denial of the permit applications. Moreover, the very use of a “checklist EA” is inappropriate to evaluate the impacts of this state action because it is not a “routine action with limited environmental impact.” ARM 17.4.609(2). Indeed, DEQ’s issuance of the first two CBM discharge permits in Montana, which authorize up to 4,200 gpm of

discharge to a 9-mile stretch of the Tongue River, is neither “routine,” nor will it have a “limited environmental impact.”

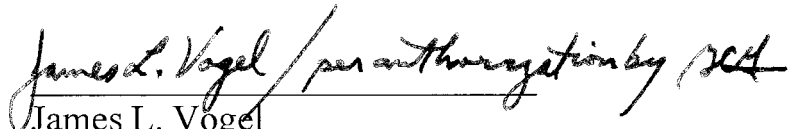
CONCLUSION

For all of the foregoing reasons, the Court should reverse the District Court’s judgment, set aside Permit No. 30457 and Permit No. 30724 and the supporting Environmental Assessment, and remand the matter to DEQ for further proceedings consistent with state and federal law – including application of the CWA’s technology-forcing mandates, a full nondegradation review under the WQA and a complete MEPA review.

Dated this 16th day of June, 2009.



John B. Arum
Brian C. Gruber
ZIONTZ, CHESTNUT, VARNELL,
BERLEY & SLONIM
2101 Fourth Avenue, Suite 1230
Seattle WA 98121
Tel. (206) 448-1230
Fax: (206) 448-0962
jarum@zcvbs.com
bgruber@zcvbs.com



James L. Vogel
VOGEL & WALD, PLLC
P.O. Box 525
Hardin, Montana 59034
Tel. (406) 665-3900

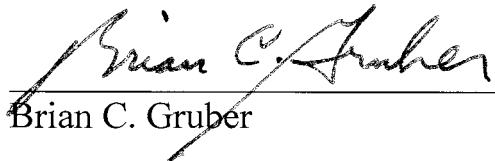
Fax: (406) 665-3901
jimvmt@email.com

*Attorneys for Appellant
Northern Cheyenne Tribe*

CERTIFICATE OF COMPLIANCE

Pursuant to Montana Rules of Appellate Procedure 11(4)(a) and 11(4)(d), I certify that this Brief is printed with proportionately spaced Times New Roman text typeface of 14 points; is double spaced; and the word count calculated by Microsoft Word is 9,962 words, excluding the certificate of service and this certificate of compliance.

Dated this 16th day of June, 2009.



Brian C. Gruber

CERTIFICATE OF SERVICE

I hereby certify that I have filed the original and nine true and correct copies of the foregoing APPELLANT NORTHERN CHEYENNE TRIBE'S OPENING BRIEF with the Clerk of the Montana Supreme Court and that I served a true and correct copy upon each attorney of record by electronic mail and by first class mail, postage prepaid, addressed as follows:

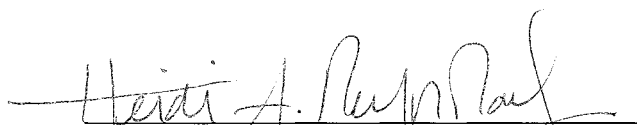
Claudia Massman
Special Assistant Attorney General
Montana Dep't of Environmental
Quality
Lee Metcalf Building
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

Jon Metropoulos
Dana L. Hupp
Gough, Shanahan, Johnson &
Waterman
33 South Last Chance Gulch
P.O. Box 1715
Helena, Montana 59624-1715

Brenda Lindlief Hall
David K. W. Wilson
Reynolds, Motl & Sherwood, PLLP
401 North Last Chance Gulch
Helena, Montana 59601

Jack Tuholske
Tuholske Law Office, P.C.
P.O. Box 7458
Missoula, MT 59807

Dated this 19th day of June, 2009.


Heidi A. Reynolds, Legal Assistant