

NO. A04-2033

State of Minnesota  
 In Supreme Court

In the Matter of the Cities of Annandale and Maple Lake  
 NPDES/SDS Permit Issuance for the Discharge of Treated  
 Wastewater and Request for Contested Case Hearing

**BRIEF OF AMICI CURIAE  
 ENVIRONMENTAL LAW AND POLICY CENTER OF THE MIDWEST,  
 NATURAL RESOURCES DEFENSE COUNCIL,  
 MIDWEST ENVIRONMENTAL ADVOCATES AND AMERICAN RIVERS**

Jane Reyer (#0296521)  
 220 Pike Lake Road  
 Grand Marais, MN 55604  
 (218) 387-3377

Nancy Stoner  
 Jon Devine  
 NATURAL RESOURCES  
 DEFENSE COUNCIL  
 1200 New York Avenue, N.W.  
 Washington, D.C. 20005  
 (202) 289-2394

Katherine Baer  
 Director, River Advocacy  
 AMERICAN RIVERS  
 1025 Vermont Avenue N.W.  
 Suite 720  
 Washington, D.C. 20005\*  
 (202) 347-7550, Ext. 3053

\*As of January 30, 2006, AMERICAN  
 RIVERS' address will be: 1101 - 14<sup>th</sup> St.  
 N.W., Suite 1400, Washington D.C.  
 20005

Albert Ettinger  
 Brad Klein  
 ENVIRONMENTAL LAW & POLICY  
 CENTER OF THE MIDWEST  
 35 East Wacker, Suite 1300  
 Chicago, IL 60601  
 (312) 795-3707

Andrew Hanson  
 MIDWEST ENVIRONMENTAL  
 ADVOCATES, INC.  
 702 East Johnson Street  
 Madison, WI 53703  
 (608) 251-5047

*Attorneys for Amici Curiae Environmental Law  
 and Policy Center of the Midwest, Natural Resources  
 Defense Council, Midwest Environmental Advocates  
 and American Rivers*

*(Additional Counsel Listed on following pages)*

Janette K. Brimmer (#174762)  
MINNESOTA CENTER FOR  
ENVIRONMENTAL ADVOCACY  
26 East Exchange Street, Suite 206  
St. Paul, MN 55101-1667  
Tel: (651) 223-5969  
Fax: (651) 223-5967

*Attorney for Respondent Minnesota Center  
for Environmental Advocacy*

Mike Hatch  
Minnesota Attorney General  
Robert B. Roche (#289589)  
OFFICE OF THE STATE  
ATTORNEY GENERAL  
445 Minnesota Street, Suite 900  
St. Paul, MN 55101-2127  
Tel: (651) 296-1506  
Fax: (651) 296-4139

*Attorneys for Appellant Minnesota  
Pollution Control Agency*

Edward J. Laubach, Jr. (#61025)  
Christopher W. Harmoning (#285948)  
Heather I. Olson (#342117)  
GRAY, PLANT, MOOTY, MOOTY  
& BENNETT, P.A.  
1010 West St. Germain Street  
Suite 600  
St. Cloud, MN 56301  
Tel: (320) 252-4414  
Fax: (320) 252-4482

*Attorneys for Appellants City of Annandale  
and City of Maple Lake*

Michael D. Madigan (#129586)  
Edward M. Tillman (#322337)  
MADIGAN, DAHL & HARLAN, P.A.  
701 Fourth Avenue South, Suite 1700  
Minneapolis, MN 55415  
(612) 604-2000

*Attorneys for Amicus Curiae Trout Unlimited and  
the Minnesota Lakes Association*

Brian Wojtalewicz (#118369)  
139 North Miles  
P.O. Box 123  
Appleton, MN 56208-0123  
(320) 289-2363

*Attorney for Amici Curiae Clean Up the  
River Environment (CURE), Coalition for  
Clean Minnesota River, New Ulm Area  
Sportfisherman, and Friends of the  
Minnesota Valley*

Charles N. Nauen (#121216)  
William A. Gengler (#210626)  
David J. Zoll (#0330681)  
LOCKRIDGE GRINDAL NAUEN P.L.L.P.  
100 Washington Avenue South, Suite 2200  
Minneapolis, MN 55401  
Tel: (612) 339-6900  
Fax: (612) 339-0981

*Attorneys for Amicus Curiae  
Metropolitan Council*

Susan L. Naughton (#259743)  
LEAGUE OF MINNESOTA CITIES  
145 University Avenue West  
St. Paul, MN 545103-2044  
(651) 281-1232

*Attorney for Amicus Curiae  
League of Minnesota Cities*

Robert S. Halagan (#136402)  
HALAGAN LAW FIRM, LTD.  
101 Courthouse Square  
15 Second Street N.W.  
Buffalo, MN 55313  
(763) 682-8975

*Attorneys for Amicus Curiae  
Wright County Mayors Association*

Timothy P. Flaherty (#0029920)  
Christopher M. Hood (#229386)  
Steven W. Nyhus (#296193)  
Kari J. Thurlow (#303008)  
FLAHERTY & HOOD, P.A.  
525 Park Street, Suite 470  
St. Paul, MN 55103  
(651) 225-8840

*Attorneys for Amici Curiae Minnesota  
Environmental Science and Economic Review  
Board and Coalition for Greater Minnesota  
Cities*

Lloyd W. Grooms (#0188694)  
Thomas H. Boyd (#0200517)  
WINTHROP & WEINSTINE, P.A.  
225 South Sixth Street, Suite 3500  
Minneapolis, MN 55402  
(612) 604-6400

*Attorneys for Amicus Curiae Builders  
Association of the Twin Cities*

Molly Mc Kee (#341885)  
LARKIN HOFFMAN DALY &  
LINDGREN, LTD.  
1500 Wells Fargo Plaza  
7900 Xerxes Avenue South  
Minneapolis, MN 55431-1194  
(952) 835-3800

Fredric P. Andes  
Erika K. Powers  
David T. Ballard  
BARNES & THORNBURG, LLP  
1 North Wacker Drive, Suite 4400  
Chicago, IL 60606-2809  
(312) 357-1313

*Attorneys for Amicus Curiae the National  
Association of Clean Water Agencies*

## TABLE OF CONTENTS

INTRODUCTION.....	1
INTEREST OF AMICI.....	2
ARGUMENT .....	4
I.    The unambiguous language of 40 CFR § 122.4(i) and the Clean Water Act mandate the Appellate Court’s interpretation of the regulation. ....	4
A.    The Clean Water Act and 40 CFR § 122.4(i) .....	4
B.    The New Discharge here at issue clearly would “contribute” to the violation of water quality standards and is not “offset” by potential reductions at Litchfield .....	7
II.   Compliance with the Clean Water Act will not foreclose economic development or municipal growth given the practical alternatives.....	11
A.    Using wastewater systems that do not discharge to water .....	11
B.    Using More Advanced Wastewater Treatment.....	15
C.    Completing the Crow River and Lake Pepin TMDLs or at least completing a phosphorus load allocation and compliance schedules ....	16
CONCLUSION .....	19

**TABLE OF AUTHORITIES**

**CASES**

*American Canoe Assoc. v. U.S. Environmental Protection Agency*, 54 F. Supp. 2d 621 (E.D. Va. 1999) ..... 2

*American Paper Institute v. U.S. Environmental Protection Agency*, 996 F.2d 346 (D.C. Cir. 1993)..... 5

*Arkansas v. Oklahoma*. 503 U.S. 91 (1992)..... 10

*Carlota Copper*, 2004 EPA App. LEXIS 35 at \*126..... 8

*In re Carlota Copper Co.*, NPDES Appeal Nos. 00-23 & 02-06, 2004 EPA App. LEXIS 35 (September 30, 2004)..... 8

*In re City of Marlborough, Massachusetts Easterly Wastewater Treatment Facility*, NPDES Appeal No. 04-13, 2005 EPA App. LEXIS 14 (August 11, 2005) ..... 16

*Friends of the Wild Swan, Inc. v. U.S. Environmental Protection Agency*, 130 F. Supp. 1204 (D. Mont. 2000) ..... 17, 19

*In re Ocoee River Dam No. 2 Hydroelectric Project*, 717 F.2d 992 (6<sup>th</sup> Cir. 1983)..... 4

*Sierra Club v. Browner*, 843 F. Supp. 1304 (D. Minn. 1993)..... 2

*Tankar Gas, Inc. v. Lumbermen’s Mut. Casualty Co.*, 215 Minn. 265, N.W. 2d 754 (Minn. 1943)..... 9

**STATUTES**

33 U.S.C. § 1251(a)..... 1, 2, 4

33 U.S.C. § 1281 ..... 11

33 U.S.C. § 1313(d) ..... 2

**REGULATIONS**

40 CFR § 122.4(i)..... 1, 4, 5, 7, 9, 10, 16

**OTHER AUTHORITIES**

*American Heritage College Dictionary* 303 (3d ed. 2000)..... 8

California Environmental Protection Agency, State Water Resources Control Board, <http://www.waterboards.ca.gov/recycling/munirec.html> (visited Dec. 29, 2005) ..... 13

CH2M Hill, Evaluation of Exemplary WWTPs Practicing High Removal of Phosphorus, [http://www.client-ross.com/Spokane-river/docs/Technology\\_WWTP%20evaluation%20by%20CH2MHill%2011-21-05.pdf](http://www.client-ross.com/Spokane-river/docs/Technology_WWTP%20evaluation%20by%20CH2MHill%2011-21-05.pdf) (visited Dec. 29, 2005)..... 15

Danielson, Todd, “No Long Pipelines and No TMDLs,” *Water Environment and Technology*, p. 22 (Nov. 2004)..... 13

General Accounting Office, Information on the Use of Alternative Wastewater Treatment Systems, GAO/RCED-94-109 (September 1994). ..... 14

Hammer M.J and Hammer Jr. M.J., *Water and Wastewater Technology*, pp. 485, 499 (3d. ed. 1996) ..... 13

Hampton Roads Sanitation District, <http://www.hrsd.state.va.us/waterreuse.htm> (visited Dec. 29, 2005) ..... 13

Luederitz, V., *et al.*, Nutrient removal efficiency and resource economics of vertical flow and horizontal flow constructed wetlands, *Ecological Engineering* 18, 157-171 (2001) ..... 14

Maehlum, P.D., *et al.*, Cold-Climate Constructed Wetlands, *Wat. Sci. Tech.*, 32(3), 95-101 (1995)..... 14

Metcalf & Eddy, *Wastewater Engineering: Treatment, Disposal and Reuse*, pp 928-929 (3d. ed.1991) ..... 12

Sheaffer Systems Projects, <http://www.sheafferinternational.com/projects.html> (visited Dec. 29, 2005) ..... 14

Shehab, O., Optimizing Phosphorus Removal at the Ann Arbor Wastewater Treatment Plant, *Wat. Sci. Tech.* 34(1-2), 493-499 (1996) ..... 15

Solley, D., and Barr, K., Optimize What You Have First! Low Cost Upgrading of Plants for Improved Nutrient Removal, *Wat. Sci. Tech.* 39(6), 127-134 (1999) ..... 15

Texas Water Development Board,  
<http://www.twdb.state.tx.us/assistance/conservation/Municipal/Reuse/Reuse.asp>  
 (visited Dec. 29, 2005) ..... 13

City of Tucson, Tucson Water Department,  
[http://www.ci.tucson.az.us/water/reclaimed\\_water.htm](http://www.ci.tucson.az.us/water/reclaimed_water.htm) (visited Dec. 29, 2005) ..... 13

U.S. Environmental Protection Agency, 2003 Water Quality Trading Policy,  
<http://www.epa.gov/owow/watershed/trading/tradingpolicy.html>  
 (visited Dec. 29, 2005) ..... 9

U.S. Environmental Protection Agency, List of Approved TDMLs,  
[http://oaspub.epa.gov/pls/tmdl/waters\\_list.tmdls?polid=29&pollutant=PHOSPHORUS](http://oaspub.epa.gov/pls/tmdl/waters_list.tmdls?polid=29&pollutant=PHOSPHORUS) (visited Dec. 29, 2005) ..... 18

U.S. Environmental Protection Agency, Nutrient Criteria, Technical Guidance  
 Manual, Rivers and Streams, EPA -822-B-00-002 (July 2000)..... 4

U.S. Environmental Protection Agency, Water Recycling and Reuse: The  
 Environmental Benefits, <http://www.epa.gov/region9/water/recycling/index.html>  
 (visited Dec. 29, 2005) ..... 14

White, J.S., *et al.*, Sediment storage of phosphorus in a northern prairie wetland receiving municipal and agro-industrial wastewater, *Ecological Engineering* 14, 127-138 (2000)..... 14

## **INTRODUCTION**

Appellants and the various amici curiae who support appellants argue that the Court of Appeals' interpretation of the federal regulation, which prohibits allowing new discharges that contribute to a violation of water quality standards, is not compelled by the regulatory language or by the policies adopted by Congress in the Clean Water Act. Appellants and the amici have also argued that the Court of Appeals' reading of the federal regulation will stifle economic growth in Minnesota. They are wrong on both counts.

The interpretation of 40 CFR § 122.4(i) adopted by the Court of Appeals is plainly required by the language of the regulation. Moreover, the Court of Appeals' reading of the regulation is compelled by the Congressional objectives for the Clean Water Act, set forth in Section 101 of the Act, to restore the nation's waters and eliminate all discharges. 33 U.S.C. § 1251(a).

Moreover, the fear that the Court of Appeals' ruling will stifle growth or the Minnesota economy is entirely unjustified. First, the parade of horrors presented by the Minnesota Pollution Control Agency ("PCA") is based on a misinterpretation of the law and the Court of Appeals' decision. The Court of Appeals' decision does not prohibit new wastewater treatment plants or other steps that would improve water quality, and it does not logically or practically inhibit economic growth. In fact, from working to restore and maintain water quality in the Midwest and across the country, the Environmental Law & Policy Center of the Midwest ("ELPC"), the Natural Resources Defense Council ("NRDC"), Midwest Environmental Advocates ("MEA") and American Rivers are aware of numerous

ways in which municipalities and economies can freely grow without violating the Clean Water Act or frustrating the national goal of restoring the nations' rivers, lakes and streams.<sup>1</sup>

### INTEREST OF AMICI

ELPC, NRDC, MEA and American Rivers are all organizations committed to the realization of the Congressional objective of the Clean Water Act to restore and maintain the chemical, physical and biological integrity of the nation's waters. 33 U.S.C. § 1251(a). We have sought through our work to promote achievement of the national goal that the nation's waters provide for fish, wildlife and recreation and the elimination of the discharge of pollutants to the nation's waters that was to be achieved two decades ago. 33 U.S.C. § 1251(a)(1),(2).

In particular, ELPC, NRDC, MEA and American Rivers have worked to implement the requirement of Section 303 of the Clean Water Act, 33 U.S.C. § 1313(d), that the total maximum daily load ("TMDL") be calculated for waters that do not meet the fishable/swimmable water quality standards to establish the water body's capacity to tolerate pollution while still meeting water quality standards. These Section 303(d) requirements should have been implemented beginning in 1979. *American Canoe Assoc. v. U.S. Environmental Protection Agency*, 54 F. Supp. 2d 621, 623 (E.D. Va. 1999); *Sierra Club v. Browner*, 843 F. Supp. 1304, 1307 (D. Minn. 1993). Unfortunately, U.S. EPA and many

---

<sup>1</sup>Undersigned counsel for ELPC, NRDC, MEA and American Rivers certify pursuant to Rule 129.03 of the Minnesota Rules of Appellant Procedure that no counsel for any party authored this brief in whole or in part and that no one made a monetary contribution to the preparation or submission of this brief other than ELPC, NRDC, MEA and American Rivers.

states, including Minnesota, have moved very slowly in fulfilling this obligation with the result that many impaired waters, including Lake Pepin, still do not have TMDLs established more than 25 years later.

ELPC, NRDC, MEA and American Rivers have also worked actively to prevent and remediate the kind of pollution directly at issue here, nutrient pollution in the form of phosphorus. Nutrient pollution (mainly phosphorus and nitrogen) is a major national problem. As explained by U.S. EPA:

Human health problems can be attributed to nutrient enrichment. One serious human health problem associated with nutrient enrichment is the formation of trihalomethanes (THMs). Trihalomethanes are carcinogenic compounds that are produced when certain organic compounds are chlorinated and bromated as part of the disinfection process in a drinking water facility. Trihalomethanes and associated compounds can be formed from a variety of organic compounds including humic substances, algal metabolites and algal decomposition products. The density of algae and the level of eutrophication in the raw water supply has been correlated with the production of THMs.

\* \* \*

Nutrient impairment can cause problems other than those related to human health. One of the most expensive problems caused by nutrient enrichment is the increased treatment required for drinking water... Adverse ecological effects associated with nutrient enrichment include reductions in dissolved oxygen (DO) and the occurrence of HABs (harmful algal blooms). High algal and macrophyte biomass may be associated with severe diurnal swings in DO and pH in some water bodies. Low DO can release toxic metals from sediments contaminating habitats of local aquatic organisms. In addition, low DO can cause increased availability of toxic substances like ammonia and hydrogen sulfide, reducing acceptable habitat for most aquatic organisms, including valuable game fish. Decreased water clarity (increased turbidity) can cause loss of macrophytes and creation of dense algal mats. Loss of

macrophytes and enrichment may alter the native composition and species diversity of aquatic communities.<sup>2</sup>

Amici have worked to prevent waters from being impaired by nutrients and to develop TMDLs and other means to restore waters, such as Lake Pepin, that are impaired by nutrients.

### **ARGUMENT**

#### **I. The unambiguous language of 40 CFR § 122.4(i) and the Clean Water Act mandate the Appellate Court's interpretation of the regulation.**

The plain language of 40 CFR § 122.4(i), the Clean Water Act and essentially all of the relevant authority support the Court of Appeals' position that the new discharge could not be permitted.

##### **A. The Clean Water Act and 40 CFR § 122.4(i)**

The objective of the CWA "is to restore and maintain the chemical, physical and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). In the CWA, Congress set as an interim national goal, known as the "fishable/swimmable goal," that "wherever attainable ... water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by July 1, 1983." 33 U.S.C. § 1251(a)(2). Further, "[o]ne of the primary objectives of the Act, as stated in section 101, 33 U.S.C. § 1251(a)(1), is to achieve the national goal 'that the discharge of pollutants

---

<sup>2</sup> U.S. Environmental Protection Agency, Nutrient Criteria, Technical Guidance Manual, Rivers and Streams, EPA -822-B-00-002 (July 2000) (pp. 4-5, citations omitted).

into navigable waters be eliminated by 1985.” *In re Ocoee River Dam No. 2 Hydroelectric Project*, 717 F.2d 992, 998 (6<sup>th</sup> Cir. 1983).

Obviously, creation of new discharges moves our waters in the opposite direction from achieving the discharge-elimination and fishable/swimmable goals of the CWA. This is particularly true if the new discharge under consideration is allowed into a water body that is already failing to meet the fishable/swimmable standards or is in danger of doing so. Section 301(b)(1)(C) of the Act, 33 U.S.C. § 1311(b)(1)(C), prohibits allowing any discharge if it would cause a violation of state water quality standards. As explained by *American Paper Institute v. U.S. Environmental Protection Agency*, 996 F.2d 346, 350 (D.C. Cir. 1993), permit “[l]imitations must control all pollutants or pollutant parameters (either conventional, nonconventional or toxic pollutants) which ... are or may be discharged at a level which will cause, have a reasonable potential to cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality.” If the receiving waters are already violating state standards, a new discharge will exacerbate the problem.

40 CFR § 122.4(i) straightforwardly implements the policies and requirements of the Clean Water Act in providing:

[No NPDES permit may be issued to] a ... new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA,

and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:

- (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
- (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

As held by the Court of Appeals, the first sentence of this regulation prohibits a new discharge if it will contribute to a violation of water quality standards, and provides that a new discharge that would significantly increase the discharge of a pollutant to a water body that was already in violation of water quality standards for that pollutant would fall into this category. *In re Cities of Annandale & Maple Lk. NPDES/SDS Permit Issuance For Discharge of Treated Wastewater*, 702 N. W. 2d 768, 775 (Minn. Ct. App. 2005). The rest of the regulation quoted above further confirms the Court of Appeals' interpretation by making clear that although a new discharge to a water body in violation of standards would normally be prohibited, it is permissible to allow certain new discharges to waters that violate water quality standards under certain limited circumstances where the owner or operator has made a particular demonstration. Not by coincidence, the circumstances in which new discharges may be allowed into an impaired water body are precisely those in which the owner or operator has demonstrated that the fishable/swimmable goal of the Clean Water Act will not be frustrated because the new discharge will be allowed as part of a plan that will bring the water into compliance with standards.

- B. The new discharge at issue here clearly would “contribute” to the violation of water quality standards and is not “offset” by potential reductions at Litchfield

Disdaining to read the regulation as a whole, the Pollution Control Agency has offered an interpretation of 40 CFR § 122.4(i) based on an interpretation of the first sentence of the regulation that fails to give the word “contribute” its plain meaning and ignores the rest of the regulatory language. There is no dispute that the new Annandale/Maple Lake permit considered by itself would add to the phosphorus impairment of the Crow River and Lake Pepin. Yet, PCA claims that because a separate facility in Litchfield will reduce phosphorus loadings, the increased discharge of phosphorus from the Cities of Annandale and Maple Lake does not “contribute” to the phosphorus impairment of Lake Pepin. However, the interpretation of “contribute” offered by PCA simply does not accord with English usage.

To see that PCA is trying unreasonably to stretch the meaning of “contribute,” it is important to keep two things in mind. First, no one claims that the Litchfield reduction of phosphorus will end the Lake Pepin impairment. Second, it is not claimed that Litchfield’s reduction is in any way related to the Annandale and Maple Lake increases. Annandale and Maple Lake did not pay Litchfield to make reductions that Litchfield was not otherwise required to make and the Litchfield reductions are not required by or enforceable through the Annandale/Maple Lake NPDES permit. The only relationship between the Litchfield reduction and the Annandale/Maple Lake increase is that they are expected to occur at roughly the same time.

Under these circumstances, the Annandale/Maple Lake permit plainly would “contribute” to the impairment under any normal use of the term. The Annandale/Maple Lake discharge will “help bring about” the Lake Pepin impairment. *See American Heritage College Dictionary* 303 (3d ed. 2000). No one would deny that a person who tossed his garbage on the sidewalk had contributed to a neighborhood litter problem just because someone else was cleaning up the neighborhood on the same day. Certainly, a taxpayer has “contributed” to a charity and would be able to deduct the amount given on his tax return even if another regular contributor decided not to contribute that year.

PCA cites *In re Carlota Copper Co.*, NPDES Appeal Nos. 00-23 & 02-06, 2004 EPA App. LEXIS 35 (September 30, 2004), in support of its position that the Annandale/Maple Creek discharge would not “cause or contribute” to the Lake Pepin impairment (PCA Brief p. 35), because its pollution allegedly will be “offset”. But even assuming that the regulations permit the use of offsets to permit new discharges to an impaired water, *Carlota Copper* actually serves to further illustrate that what PCA attempted to permit here is not an “offset” and does “cause or contribute.” As stated by PCA itself in its brief, in *Carlota Copper* “EPA’s permit required the permittee to offset its new discharge of copper by remediating an old mining site on the same creek.” (PCA Brief at 35). Here, the Annandale/Maple Creek permit has nothing to do with the Litchfield permit and PCA is not requiring Annandale or Maple Creek to take responsibility for any reduction of phosphorus loadings to Lake Pepin as part of the permit. Moreover, in *Carlota Copper* after the actions to be permitted are fully

implemented, there is to be no impairment. *Carlota Copper*, 2004 EPA App. LEXIS 35 at \*126. Here, it is clear that the Litchfield reduction will still leave Lake Pepin impaired.

Rather than being any sort of “offset” for the Annandale/Maple Lake increase, the Litchfield reduction should be viewed as partial step to remediate the numerous other loadings to Lake Pepin that have been permitted over the past decades. Similarly, claims by appellants and the amici supporting reversal that the Court of Appeals’ decision is inconsistent with U.S. EPA trading policies misinterpret U.S. EPA’s January 13, 2003 trading policy. *See* <http://www.epa.gov/owow/watershed/trading/tradingpolicy.html> (visited Dec. 29, 2005). The EPA trading policy is based on a cap and trade scheme in which the overall pollution cap is set based on the assimilative capacity of the water body and trades are made within that pollution cap. Here, PCA did not develop any overall pollutant cap to allow a “cap and trade” scheme. Further, Annandale and Maple Lake did not trade anything to Litchfield and Litchfield provided no reduction of pollution here that was not already required under PCA’s rules. PCA is simply attempting to allow Annandale and Maple Lake to reap an unjustifiable benefit from a pollution reduction that they did not sow.

Still further, appellants’ interpretation of 40 CFR § 122.4(i) ignores most of the regulation, violating the basic principles that legal language should always be construed as a whole and that it is unsafe to parse out separate words or phrases from a legal provision. *See Tankar Gas, Inc. v. Lumbermen’s Mut. Casualty Co.*, 215 Minn. 265, 269-70, 9 N.W. 2d 754, 757-58 (Minn. 1943). The second quoted sentence of the regulation describes what kind of program would allow a new discharge of a pollutant to a water body not meeting water

quality standards for that pollutant.<sup>3</sup> The kind of pollutant load allocations and compliance schedules set forth as preconditions for allowing a new discharge of pollutants into an impaired stream are precisely the kind of “long-range areawide programs to alleviate and eliminate existing pollution” contemplated by the Supreme Court in *Arkansas v. Oklahoma*, 503 U.S. 91, 108 (1992). The regulation and the Court of Appeals’ decision do not enact any absolute ban on new discharges of pollutants to water bodies impaired by those pollutants but they do follow the Clean Water Act by insisting that new discharges not be allowed except pursuant to a plan that will bring the water body back into compliance. However, in this case the PCA allowed a new discharge that falls far outside of what is permitted by the Clean Water Act, regulation 40 CFR § 122.4(i), or *Arkansas v. Oklahoma*.

PCA’s position allows it to arbitrarily grant indulgences to new dischargers based on whatever reductions happen to come in at the time. If another permit applicant wants to build a new discharge that contributes to the Crow River and Lake Pepin impairments, will PCA just grant such permits on first-come first-served basis until the Litchfield “offset” is exhausted? If so, the Litchfield reduction will prove ultimately to have done nothing for the receiving waters, and other dischargers that may need to increase discharges more than Annandale and Maple Creek may be unjustly frustrated. Only with an actual long-term area

---

<sup>3</sup> Indeed, under PCA’s interpretation of 40 CFR § 122.4(i), the second sentence of the regulation details a number of requirements for demonstrations that would never actually be required of any new discharger because any new discharger that could identify reductions that “offset” his increase would be deemed not to “cause or contribute.” Under the PCA interpretation, it would be childishly easy to circumvent the safeguards provided in the second sentence against allowing new pollution that makes it harder to bring water bodies into compliance with water quality standards.

wide program developed with public input that reduces pollution enough to remove the impairment can PCA protect the environment or act with any degree of openness and fairness.

**II. Compliance with the Clean Water Act will not foreclose economic development or municipal growth given the practical alternatives.**

The Appellate Court's ruling has been portrayed by Appellants and the amici that support appellants as an obstacle to economic growth and affordable housing. It is even claimed that the Court of Appeals ruling will prevent cities from upgrading old and overloaded sewerage treatment facilities. (PCA Brief at 28) This portrayal is completely inaccurate and fails to recognize that there are a number of practical ways that growth can be permitted in impaired watersheds without violating the Clean Water Act.

**A. Using wastewater systems that do not discharge to water**

Cities and businesses can grow without creating new discharges at all. This is exactly what Congress expected when it passed the Clean Water Act setting the goal of eliminating all discharges by 1985. Specifically, with regard to municipal discharges, Congress sought to encourage wastewater treatment that, instead of discharging pollutants to the nation's waters, reused and recycled wastewater and returned water to the ground. *See* 33 U.S.C. § 1281. The legislative history of the Clean Water Act discloses that Congress specifically sought to promote ecologically sound land disposal systems of wastewater and that most municipalities would eventually use such systems. The Senate Committee quoted an EPA study of the time and stated in its report on the bill:

Alternative waste treatment methods, which requires the return of pollutants to natural cycles, are only new in the sense that they have re-emerged for application. This method is most commonly associated with the Muskegon project although other recent examples include work at Penn State University and Michigan State University and elsewhere.

The Environmental Protection Agency, in Volume II of the 1971 report on “The Cost of Clean Water”, states:

They (ground disposal procedures) have the great virtue of recycling the materials so disposed, both by replenishing water tables and by converting and utilizing organic and inorganic waste matter in natural life processes of decay and growth. Their secondary merit is more germane to this discussion. Water reaching watercourses after passage through the filtering and decomposition processes afforded by soil is far purer—provided that soil loading rates are not exceeded—than any waste treatment process short of distillation could make them.

The Committee emphasizes that the policy in Section 201, read with the policy stated in Section 101, requires the Administrator to direct his research and development authority under sections 104 and 105 to carry out those policies.

S. Rep. No. 92-414 (1971), reprinted in 1972 U.S.C.C.A.N. 3668 at 3691.

As intended by Congress, use of natural treatment systems that emphasize water reuse, nutrient recycling and the use of wastewater for crop production has been revived as a result of the passage of the Clean Water Act. Metcalf & Eddy, *Wastewater Engineering: Treatment, Disposal and Reuse*, pp 928-929 (3d. ed. 1991).<sup>4</sup> Numerous communities across the country are now treating their wastewater by reusing it instead of discharging it to surface waters. For example:

---

<sup>4</sup> Examples of these natural systems are discussed in Ronald W. Crites, *Natural Wastewater Treatment Systems*, Taylor & Francis (2005), and Sherwood C. Reed, *Natural Systems for Wastewater Treatment*, Water Environment Federation (2d. ed. 2001).

- In Virginia, to minimize nutrient inputs to Chesapeake Bay, Hampton Roads Sanitation District in Virginia reclaims water for reuse for industrial purposes. (0.5 million gallons per day (“MGD”)) This is the first case in Virginia in which water is reused for industrial purposes as opposed to irrigation. Hampton Roads Sanitation District, <http://www.hrsd.state.va.us/waterreuse.htm> (visited Dec. 29, 2005).
- Also, in Virginia, housing development and growth has occurred despite the impaired state of the Chesapeake Bay through use of decentralized wastewater systems that have no discharge and that recharge groundwater. Danielson, Todd, “No Long Pipelines and No TMDLs,” Danielson, Todd, “No Long Pipelines and No TMDLs,” *Water Environment and Technology*, p. 22 (Nov. 2004).
- In Texas, the total amount of municipal wastewater reuse reported for 1998 was approximately 160 MGD, mostly for golf course irrigation, manufacturing, and cooling towers. Five cities in Texas reused more than 10 MGD in 2002. Texas Water Development Board, <http://www.twdb.state.tx.us/assistance/conservation/Municipal/Reuse/Reuse.asp> (visited Dec. 29, 2005).
- Tucson Water, a department of the City of Tucson, delivers reclaimed water to 14 golf courses, 32 parks, 40 schools, and over 300 residents for irrigation. City of Tucson, Tucson Water Department, [http://www.ci.tucson.az.us/water/reclaimed\\_water.htm](http://www.ci.tucson.az.us/water/reclaimed_water.htm) (visited Dec. 29, 2005).
- Returning treated wastewater to the ground and land application of wastewater have been practiced for many years in California. Also, municipal wastewater, instead of being a source of pollution, has been a resource for prevention of saltwater intrusion to drinking water and for irrigation of crops. Hammer M.J and Hammer Jr. M.J., *Water and Wastewater Technology*, pp. 485, 499 (3d. ed. 1996).
- In a 2002 survey in California, over 250 facilities reported reusing some portion of their wastewater for a total of approximately 525,000 acre-ft per year. Most of the water is used for landscape and agricultural irrigation. California Environmental Protection Agency, State Water Resources Control Board, <http://www.waterboards.ca.gov/recycling/munirec.html> (visited Dec. 29, 2005).
- Several Midwestern communities, homebuilders, industries, resorts, schools, and other institutions are using wastewater reclamation and reuse systems to manage wastewater as a raw material in the production of food and fiber. Some examples include the communities of Muskegon, Michigan, Kewanna, Indiana, and Cortland, Illinois; subdivisions in Long Grove, Round Lake Park, and Kane County, Illinois;

industrial farms in Decatur, Illinois, Guthrie Center, Iowa, Atlantic, Iowa, and Clarke County, Iowa; and resorts in Mercersburg, Pennsylvania, Glen Arbor, Michigan, and Lockport Township, Illinois. Information on these projects is available at Sheaffer Systems Projects, <http://www.sheafferinternational.com/projects.html> (visited Dec. 29, 2005).

- Natural and constructed wetlands are being used as cost-effective and environmentally sound alternatives for wastewater treatment, even in cold northern climates. For example, a restored bulrush marsh at Frank Lake, Alberta (60 km south of Calgary) is providing effective wastewater treatment for a local beef slaughterhouse and municipality. White, J.S., *et al.*, Sediment storage of phosphorus in a northern prairie wetland receiving municipal and agro-industrial wastewater, White, J.S., *et al.*, Sediment storage of phosphorus in a northern prairie wetland receiving municipal and agro-industrial wastewater, *Ecological Engineering* 14, 127-138 (2000); *see also* Luederitz, V., *et al.*, Nutrient removal efficiency and resource economics of vertical flow and horizontal flow constructed wetlands, *Ecological Engineering* 18, 157-171 (2001); Maehlum, P.D., *et al.*, Cold-Climate Constructed Wetlands, *Wat. Sci. Tech.*, 32(3), 95-101 (1995).
- U.S. EPA describes a wide variety of water reuse approaches that allow municipal wastewater to be handled without a discharge. U.S. Environmental Protection Agency, Water Recycling and Reuse: The Environmental Benefits, <http://www.epa.gov/region9/water/recycling/index.html> (visited Dec. 29, 2005); *see also* General Accounting Office, Information on the Use of Alternative Wastewater Treatment Systems, GAO/RCED-94-109 (September 1994).

We do not know whether systems that do not discharge are suitable for Annandale and Maple Creek.<sup>5</sup> However, for many communities in impaired watersheds, these systems have proven to be an effective way to allow growth that is not affected at all by the Clean Water Act general prohibition on new discharges that cause or contribute to the violation of a water quality standard.

---

<sup>5</sup> Annandale had a land disposal system that it decided to replace with a discharging system. While the Annandale land treatment system is said to be old, it is unknown whether Annandale would have chosen to replace its land treatment system with a system that increased loadings of phosphorus to Lake Pepin had PCA insisted that Annandale not create a new discharge that contributed to the Lake Pepin impairment.

## B. Using More Advanced Wastewater Treatment

In many cases, growth and increased discharges can be allowed if the discharger simply improves its level of wastewater treatment. Construction or operation of a new source or new discharge that does not increase loading of the pollutant causing the impairment would not “cause or contribute” to a violation of water quality standards. Also, even optimizing or upgrading existing plants “can sometimes produce surprisingly high nutrient removal levels for a very modest capital expenditure.” Solley, D., and Barr, K., Optimize What You Have First! Low Cost Upgrading of Plants for Improved Nutrient Removal, *Wat. Sci. Tech.* 39(6), 127-134 (1999).<sup>6</sup>

Appellants and the amici who support their position have all treated this case as though there is no way to avoid discharging more than 3,600 pounds of phosphorus into the Crow River, but that is simply not the case. The 1.0 mg/L limit in the Annandale/Maple Creek permit is not stringent and the cities could certainly do better as are a number of other cities around the country. For example:

- A recent paper by the national engineering firm CH2M Hill details how the cities of Las Vegas, Nevada; Alexandria, Virginia; Rock Creek, Oregon; Durham, Oregon; Cauley Creek, Georgia; Lone Tree, Colorado; Walton, New York; Iowa Hill, Colorado; Pinery, Colorado; and Stamford, New York all have phosphorus limits of 0.2 mg/L or less and how they are meeting those limits. CH2M Hill, Evaluation of Exemplary WWTPs Practicing High Removal of Phosphorus, [http://www.client-ross.com/Spokane-river/docs/Technology\\_WWTP%20evaluation%20by%20CH2MHill%2011-21-05.pdf](http://www.client-ross.com/Spokane-river/docs/Technology_WWTP%20evaluation%20by%20CH2MHill%2011-21-05.pdf) (visited Dec. 29, 2005).

---

<sup>6</sup> The City of Ann Arbor provides a good example of this principle of optimization. See Shehab, O., Optimizing Phosphorus Removal at the Ann Arbor Wastewater Treatment Plant, *Wat. Sci. Tech.* 34(1-2), 493-499 (1996).

- A recent article highlights how the city of Las Vegas, N.M, which has a phosphorus limit of 0.17 mg/L, has discharged consistently under 0.1 mg/L. “Las Vegas Wins with Team Approach,” *Water Environment and Technology*, pp. 64, 68 (Dec. 2004).
- The Environmental Appeals Board recently decided a case in which U.S. EPA had set a phosphorus permit limit for a municipal wastewater treatment plant of 0.1 mg/L. The Board remanded the case to the agency on the ground that 0.1 mg/L might not be sufficiently restrictive. *In re City of Marlborough, Massachusetts Easterly Wastewater Treatment Facility*, NPDES Appeal No. 04-13, 2005 EPA App. LEXIS 14 (August 11, 2005).

These examples make clear that by using wastewater treatment technologies that are in use in many places across the country, Annandale and Maple Creek could have “constructed and operated” a new or upgraded plant under 40 CFR § 122.4(i) without making any new contribution of phosphorus to the Lake Pepin watershed.<sup>7</sup> Using such treatment would not be a superhuman feat and there is certainly no showing that so limiting phosphorus concentrations from the Annandale/Maple Creek plant would have worked a great economic hardship on the cities or made growth impossible.

C. Completing the Crow River and Lake Pepin TMDLs or at least completing a phosphorus load allocation and compliance schedules

Finally, of course, PCA could allow new discharges to impaired water bodies if it complies with 40 CFR § 122.4(i) by completing a TMDL or at least a phosphorus load allocation and compliance schedule. PCA could prioritize its work on TMDL development to

---

<sup>7</sup> To have avoided any increased new discharge of phosphorus to Lake Pepin, it would be necessary for Annandale/Maple Creek to treat the wastewater to a lower concentration of phosphorus than the 1.0 mg/L level that is required by the permit at issue. Although the record is not sufficiently clear to allow Amici to calculate the necessary concentration limit with certainty, it appears that lowering the permit limit to .38mg/L (1400 ÷ 3600) would have been adequate to avoid any new loading.

complete TMDLs first for watersheds with growing communities seeking new permits. See *Friends of the Wild Swan, Inc. v. U.S. Environmental Protection Agency*, 130 F. Supp. 2d 1204, 1205 (D. Mont. 2000).

While PCA apparently has completed only one TMDL for phosphorus, pollution control agencies for some other states have done better. Just looking at states in the region, it is clear that completing a TMDL for phosphorus in a timely manner is not an impossible mission:

<b>Approved Phosphorus TMDLs for Michigan, North Dakota, South Dakota, and Wisconsin</b>			
<b>State / Date</b>	<b>TMDL Name</b>	<b>State / Date</b>	<b>TMDL Name</b>
MI 12/05/00	BELLEVILLE LAKE	SD 11/09/01	LAKE ALVIN TMDL
MI 12/05/00	BELLEVILLE LAKE	SD 04/12/99	LAKE BYRON
MI 02/29/00	BRIGHTON LAKE	SD 04/12/99	LAKE FAULKTON
MI 12/05/00	FORD LAKE	SD 04/12/99	LAKE FAULKTON
MI 11/09/04	GREAT BEAR LAKE	SD 06/03/04	LAKE HANSON
MI 03/10/00	KENT LAKE	SD 04/12/99	LAKE HENDRICKS/ UPPER DEER CREEK
MI 04/24/01	LAKE ALLEGAN	SD 04/12/99	LAKE HENDRICKS/ UPPER DEER CREEK
MI 04/24/01	LAKE ALLEGAN	SD 04/12/99	LAKE HENDRICKS/ UPPER DEER CREEK
MI 04/13/00	LAKE MACATAWA	SD 09/29/04	LAKE HERMAN
MI 04/13/00	LAKE MACATAWA	SD 04/12/99	LAKE HIDDENWOOD
MI 04/13/00	LAKE MACATAWA	SD 04/12/99	LAKE HIDDENWOOD
MI 02/18/00	ORE LAKE	SD 11/09/01	LAKE LOUISE
MI 08/02/00	STRAWBERRY LAKE	SD 11/09/01	LAKE LOUISE
ND 02/27/97	GOODMAN CREEK	SD 04/12/99	LAKE MADISON
ND 02/06/04	HEART RIVER - LOWER SEGMENT	SD 04/12/99	LAKE MADISON
ND 02/06/04	HEART RIVER - UPPER SEGMENT	SD 04/12/99	LAKE MADISON
ND 02/06/04	PATTERSON LAKE	SD 04/12/99	LAKE MADISON
ND 02/06/04	PATTERSON LAKE	SD 04/22/97	LAKE MITCHELL,

			FIRESTEEL CREEK
ND 02/06/04	RICE LAKE	SD 11/09/01	LAKE OLIVER
ND 02/06/04	RICE LAKE	SD 04/12/99	LAKE REDFIELD/ TURTLE CREEK
ND 02/06/04	RICE LAKE	SD 04/12/99	LAKE REDFIELD/ TURTLE CREEK
SD 12/26/96	BIG STONE LAKE	SD 04/02/03	LOYALTON DAM
SD 02/07/01	BLUE DOG LAKE	SD 04/02/03	MINA LAKE
SD 02/07/01	BLUE DOG LAKE	SD 04/02/03	MINA LAKE
SD 09/29/04	BRAKKE DAM	SD 04/02/03	MINA LAKE
SD 04/12/99	BRANT LAKE	SD 04/12/99	RAVINE LAKE
SD 04/12/99	BRANT LAKE	SD 04/12/99	RAVINE LAKE
SD 06/03/04	BYRE LAKE	SD 04/12/99	RAVINE LAKE
SD 02/07/01	CLEAR LAKE	SD 04/02/03	ROSE HILL LAKE
SD 02/07/01	CLEAR LAKE	SD 04/02/03	ROSE HILL LAKE
SD 02/07/01	CLEAR LAKE	SD 04/12/99	SWAN LAKE/ TURKEY RIDGE CR.
SD 11/09/01	COTTONWOOD LAKE	SD 04/12/99	SWAN LAKE/ TURKEY RIDGE CR.
SD 11/09/01	COTTONWOOD LAKE	SD 04/12/99	SWAN LAKE/ TURKEY RIDGE CR.
SD 11/09/01	COTTONWOOD LAKE	SD 09/01/05	SYLVAN LAKE
SD 12/03/03	CRESBARD LAKE	WI 08/20/04	CASTLE ROCK CR. & GUNDERSON VALLEY CR.
SD 04/12/99	ELM LAKE	WI 08/20/04	CASTLE ROCK CR. & GUNDERSON VALLEY CR.
SD 04/12/99	ELM LAKE	WI 08/19/03	CEDAR LAKE
SD 01/14/05	FATE DAM	WI 08/19/03	CEDAR LAKE
SD 09/29/04	FISH LAKE	WI 09/08/04	HALF MOON LAKE
SD 09/29/04	HAYES LAKE	WI 09/08/04	HALF MOON LAKE
SD 04/02/03	JONES LAKE	WI 03/23/04	SILVER LAKE
SD 04/02/03	JONES LAKE	WI 03/23/04	SILVER LAKE
SD 06/03/04	LAKE ALICE	WI 08/24/00	SQUAW LAKE
SD 11/09/01	LAKE ALVIN TMDL		
Total Phosphorus TMDLs Nationwide: 898			
U.S. Environmental Protection Agency, List of Approved TDMLs, <a href="http://oaspub.epa.gov/pls/tmdl/waters_list.tmdls?polid=29&amp;pollutant=PHOSPHORUS">http://oaspub.epa.gov/pls/tmdl/waters_list.tmdls?polid=29&amp;pollutant=PHOSPHORUS</a> (visited Dec. 29, 2005)			

The PCA has had over 25 years to do a TMDL for the Crow River and Lake Pepin and cannot justly blame the Clean Water Act for any delay in its ability to grant permits needed for new development. *See Friends of the Wild Swan*, 130 F. Supp. 2d at 1211. Had PCA completed such calculations for Lake Pepin, under the Court of Appeals decision and the rule, the PCA might have allowed a new discharge to Annandale and Maple Lake that increased the discharge of phosphorus from those cities. Of course, having done this work, PCA might learn that it could not allow some or all of the proposed increase without causing unjustified hardship to other dischargers. But in that case, this proposed new discharge in fairness should not be granted.

### CONCLUSION

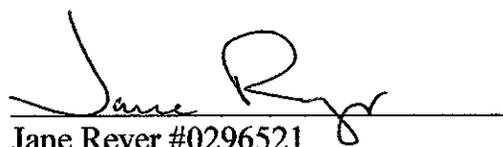
The impairment of the Crow River and Lake Pepin can only be repaired if a substantial net reduction of phosphorus loading occurs. PCA cannot use pollution reductions already required to compensate for past loadings as an excuse to allow new or increased loadings that will move the Crow River and Lake Pepin further away from meeting the goals of the Clean Water Act.

It is not necessary for economic growth for PCA to have flexibility to grant permits which violate the Clean Water Act and federal regulations established to implement the Act. Minnesota municipalities and industries can grow and expand without causing or contributing to impairments of Minnesota water bodies. This can be done by developing systems that fulfill the goals of the Clean Water Act by handling wastewater through systems

do not create a new discharge, by advanced wastewater treatment and by preparing the TMDLs that are required by the Clean Water Act.

Respectfully submitted,

Date: Jan. 4, 2006



Jane Reyer #0296521  
Counsel for Amicus Petitioners  
220 Pike Lake Road  
Grand Marais, MN 55604  
218-387-3377

Nancy Stoner  
Jon Devine  
Natural Resources Defense Council  
1200 New York Ave, NW  
Washington, DC 20005  
202-289-2394

Katherine Baer  
Director, River Advocacy  
American Rivers  
1025 Vermont Ave., NW  
Suite 720  
Washington, DC 20005\*  
202-347-7550 x3053

Albert Ettinger  
Brad Klein  
Environmental Law and Policy Center of  
the Midwest  
35 East Wacker Drive, Suite 1300  
Chicago, IL 60601  
312-795 3707

Andrew Hanson  
Midwest Environmental Advocates, Inc.  
702 E. Johnson St.  
Madison, WI 53703  
608-251-5047

---

\* As of January 30, 2006, American Rivers' address will be: 1101 14<sup>th</sup> St. NW, Suite 1400, Washington DC, 20005.