

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PRAIRIE RIVERS NETWORK,)	
NATURAL RESOURCES DEFENSE)	
COUNCIL, SIERRA CLUB,)	
ENVIRONMENTAL LAW & POLICY)	
CENTER, FRIENDS OF CHICAGO)	
RIVER and GULF RESTORATION)	
NETWORK)	
)	
Petitioners,)	
)	PCB 14-106
v.)	(O'Brien)
)	PCB 14-107
ILLINOIS ENVIRONMENTAL)	(Calumet)
PROTECTION AGENCY and)	PCB 14-108
METROPOLITAN WATER)	(Stickney)
RECLAMATION DISTRICT OF)	(Third-Party NPDES Permit Appeals -
GREATER CHICAGO)	Water)
)	(Consolidated)
Respondents.)	

NOTICE OF ELECTRONIC FILING

To: Attached Service List

PLEASE TAKE NOTICE that on May 29, 2014 I electronically filed with the Clerk of the Pollution Control Board of the State of Illinois, **PETITIONER'S RESPONSE TO MWRDGC'S PETITION FOR PARTIAL STAY OF NPDES PERMIT NO. IL 0028053** a copy of which is attached hereto and herewith served upon you.

Respectfully Submitted,



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**PETITIONER'S RESPONSE TO MWRDGC'S PETITION
FOR PARTIAL STAY OF NPDES PERMIT NO. IL 0028053**

The petition of respondent Metropolitan Water Reclamation District of Greater Chicago ("MWRD") for a partial stay of NPDES Permit No. IL0028053 ("Stickney Permit") should be denied. MWRD has not put forward evidence to support a stay of the permit and environmental harm is likely should the stay be granted.¹

Under the permit at issue, MWRD must comply with a 1.0 mg/L monthly average total phosphorus (TP) limit within 49 months of the date of issuance of the permit. In its petition for a stay, MWRD argues that in their appeal, Petitioners will "presumably" seek a lower phosphorus

¹ MWRD does not cite authority for the proposition that the relevant portions of NPDES Permit No. IL0028088 ("O'Brien permit") and NPDES Permit No. IL0028061 ("Calumet permit") are stayed by its appeal of monitoring provisions in those permits but, in any event, the O'Brien and Calumet permits are not raised by the instant petition.

effluent limit and states that should “the Board determine that the phosphorus 1.0 mg/L is insufficient to protect the receiving water and downstream waters, the District *may* have to re-evaluate, re-design, and/or re-construct the infrastructure in progress” (MWRD Petition for Partial Stay pp.2-3) (emphasis added)

MWRD is correct in its presumption that, inter alia, Petitioners seek lower phosphorus limits than 1.0 mg/L. Illinois does not currently have numeric phosphorus water quality standards for waters other than certain lakes, but it has dissolved oxygen standards and narrative standards prohibiting “plant or algal growth, color or turbidity of other than natural origin” (35 IAC 302.203) and “unnatural sludge” (35 IAC 302.403). Petitioners will argue that the permits should be remanded for IEPA to consider the proper numeric phosphorus permit limits that will prevent violations of these standards.²

We do not know what numeric phosphorus limits IEPA would derive if it studied the facts regarding necessary numeric phosphorus limits and developed a proper water quality based effluent limit. We do know that the numeric water quality standard for rivers in Wisconsin is 0.1 mg/L (= 100 µg/L), NR 102.06(3), that the U.S. EPA criteria for phosphorus for flowing waters in the relevant ecoregion is .077 mg/L TP,³ and that U.S. EPA Region 1 in developing numeric limits for dischargers of phosphorus into effluent dominated waters has imposed limits of 0.1 mg/L. *Upper Blackstone Water Pollution Abatement District v. U.S. EPA*, 690 F.3d 9 (1st Cir.) cert. denied, 133 S. Ct. 2382 (2013). Thus, after a remand by the Board and proper analysis by

² The permits do contain Special Condition No.5 stating that “effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.” To comply with this special condition, MWRD should be working to stop causing such violations. However, as shown by its Petition for Partial Stay and other conduct, MWRD apparently does not believe that it has to act to stop violating this special condition and that only numeric permit limits compel it to reduce pollution levels at least as to phosphorus.

³ The U.S. EPA Ecoregion Criteria for Ecoregion 6 “Corn Belt and Northern Great Plains” can be found at <http://www2.epa.gov/nutrient-policy-data/ecoregional-nutrient-criteria-documents-rivers-and-streams>.

IEPA of the necessary numeric phosphorus limit, a water quality-based effluent limit may be imposed that is much lower than 1.0 mg/L.

MWRD's petition suggests that work to achieve 1.0 mg/L "may" be wasted. However, MWRD's petition for a partial stay cannot be based on a mere supposition. The standards for determining whether a stay is appropriate include: 1) a certain and clearly ascertainable right needs protection; 2) irreparable injury will occur without the injunction; 3) no adequate remedy exists at law; and 4) there is a probability of success on the merits. *Motor Oils Refining Company, Inc. v IEPA* (August 31, 1989), PCB 89-116, pp 1-2, citing *Junkunc v. S.J. Advanced Technology & Mfg.*, 149 Ill. App. 3d 114 (1st Dist. 1986). In addition, the Board has noted a particular concern with the likelihood of environmental harm should a stay be granted. *Motor Oils v. IEPA* at 2.

MWRD has failed to offer facts showing any of the above elements. In support of its motion it offers the unsupported conclusion that it may suffer irreparable harm should the Board determine that the 1.0 mg/L limit is insufficient. Surely, the MWRD cannot be allowed to delay implementation of a permit condition designed to improve water quality based simply on a lawyer's statement that meeting the condition and then having to do further work later "may" require some redundant effort.

There is, moreover, reason to believe that the effort would not be redundant. It is our understanding that MWRD intends to achieve the 1.0 mg/L limit through use of a process known as enhanced biological nutrient removal.⁴ As such, evaluation, design and construction to reach 1.0 mg/L TP will likely not prove wasteful if in the future MWRD is required to do a better job of removing phosphorus from its wastewater. As explained by U.S. EPA Region 10:

⁴ See Special Condition 18 of Stickney NPDES Permit IL0028053, (Ex. 1 to Petition for Administrative Review of an NPDES Permit Issued by Illinois Environmental Protection Agency, PCB 14-108 (Stickney)).

WWTPs which utilize enhanced biological nutrient removal (EBNR) in the secondary treatment process can often reduce total phosphorus concentrations to 0.3 mg/l or less prior to tertiary filtration. While employing EBNR is not essential to achieving high phosphorus removal rates, EBNR enhances the performance and reduces operating costs (especially chemical use) of the subsequent tertiary filtration process. Recently published studies report that the longer solids retention times used in BNR processes also removes a significant amount of other pollutants contained in municipal wastewater, including toxics, pharmaceuticals, and personal care products.⁵

Thus, with EBNR, MWRD may be able to achieve a P limit as low as 0.3 mg/l.

Employing EBNR, as planned by MWRD, also enhances the performance and reduces the costs of tertiary filtration, which is an add-on to the EBNR process that allows achievement of P concentrations less than 0.3 mg/L.⁶

It appears, then, that there is little reason to fear MWRD will suffer any harm by completing the work necessary to meet the 1.0 mg/L limit. Until evidence of a real potential for irreparable harm is offered, it cannot be presumed that there will be such harm.

Finally, there is potential for serious environmental harm in granting the stay. Aquatic life uses in the waterways downstream from the Stickney WWTP are impaired by excess phosphorus.⁷ Excess phosphorus can lead to adverse ecological effects including the occurrence of harmful algal blooms, low dissolved oxygen (DO), severe diel swings in DO, high pH, and direct toxicity to both humans and aquatic animals. Phosphorus discharges by the MWRD Stickney plant are also contributing to hypoxia in the Northern Gulf of Mexico.⁸

If controls needed to reach a concentration of 1.0 mg/L are delayed as a result of the

⁵ Advanced Wastewater Treatment to Achieve Low Concentration of Phosphorus p. 3 (Region 10, USEPA 2007) www.epa.gov/region10/pdf/tmdl_awt_report.pdf.

⁶ *Id.*, p. 9.

⁷ Appendix A-2: Illinois' 2012 303(d) List <http://www.epa.state.il.us/water/tmdl/303-appendix/2012/appendix-a2.pdf>

⁸ Richard B. Alexander, Richard A. Smith, Gregory E. Schwarz, Elizabeth W. Boyer, Jacqueline V. Nolan and John W. Brakebill, "Differences in phosphorus and nitrogen delivery to the Gulf of Mexico from the Mississippi River basin." <http://pubs.acs.org/doi/abs/10.1021/es0716103>

proposed stay, the removal of phosphorus pollution will be further delayed, as may the concomitant removal of other pollutants such as toxics, pharmaceuticals, and personal care products.

CONCLUSION

MWRD has failed to show a certain and ascertainable right that needs protection or an irreparable injury to that right. The potential for harm to the environment is real and is likely, should MWRD be allowed to further delay implementation of phosphorus removal. The Petition for Partial Stay should be denied.

Respectfully Submitted,



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Date: May 29, 2014

CERTIFICATE OF SERVICE

I, Jessica Dexter, hereby certify that I have filed the attached **NOTICE OF FILING** and **PETITIONER'S RESPONSE TO MWRDGC'S PETITION FOR PARTIAL STAY OF NPDES PERMIT NO. IL 0028053** upon the parties below by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois on May 29, 2014.

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2014-106, 107, 108 Service List

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