

**NATURAL RESOURCES DEFENSE COUNCIL
SIERRA CLUB
PRAIRIE RIVERS NETWORK**

March 1, 2011

VIA CERTIFIED MAIL –
RETURN RECEIPT REQUESTED

Metropolitan Water Reclamation District
of Greater Chicago
100 East Erie Street
Chicago, IL 60611

RE: Notice of Intent to Sue for Violations of the Clean Water Act

Dear Sir or Madam:

We are writing on behalf of the Natural Resources Defense Council (“NRDC”), Sierra Club, and Prairie Rivers Network (“Claimants”), whose members recreate in and around the Chicago River, the Calumet-Sag Canal, North Shore Channel, the Sanitary and Ship Canal (collectively, the Chicago Area Waterway System or “CAWS”), the Lower Des Plaines River, the Illinois River, and other waters downstream of the discharges about which notice is given. These members are adversely affected by pollution discharged into the CAWS from the wastewater treatment plants (“WWTPs”) and combined sewer overflow (“CSO”) outfalls operated by the Metropolitan Water Reclamation District of Greater Chicago (“MWRDGC”). This letter constitutes Claimants’ notice of intent to sue for violations of the Clean Water Act (“CWA”) resulting from MWRDGC’s operation of its WWTPs and CSOs in violation of National Pollutant Discharge Elimination System (“NPDES”) permits. The violations upon which this notice letter is based are more fully set forth below.

Claimants have reason to believe that MWRDGC has repeatedly violated, and will continue to violate (1) Section 301(a) of the federal Clean Water Act, 33 U.S.C. § 1311(a); and (2) MWRDGC’s NPDES permits for discharges at its WWTPs and CSOs on the CAWS. These NPDES permits authorize discharges associated with the North Side Water Reclamation Plant, the Calumet Water Reclamation Plant, and the Stickney Water Reclamation Plant (collectively, the “CAWS WWTP Permits”). Among other violations, MWRDGC has discharged effluent from its WWTPs and CSOs that has resulted in violations of water quality standards (“WQS”) established under the CWA.

More specifically, MWRDGC has routinely discharged effluent from its CAWS WWTPs and CSOs that has caused the receiving waters to be in violation of the dissolved oxygen (“DO”) standard and the offensive conditions narrative standard requiring that receiving waters be free from sludge,

turbidity, and unnatural plant and algal growth. These discharges violate permit conditions prohibiting discharges that cause or contribute to an exceedance of applicable WQS. The specific limits at issue, and MWRDGC's repeated violations, are discussed below.

PERMIT LIMITS

The NPDES Permits held by MWRDGC, as reissued in 2002, contain a condition requiring that the "effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 ILL. ADMIN. CODE § 302." See Special Condition 5 in the Calumet (No. IL 0028061); North Side (No. IL0028088); and Stickney (No. IL 0028053) permits.

Additionally, the permits state that, "[a]ll CSO discharges authorized by this Permit shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 Ill. Adm. Code 302.203 and to prevent depression of oxygen levels below the applicable water quality standard." See Special Condition 10 in the Calumet permit (No. IL 0028061) North Side permit (No. IL0028088) and Stickney permit (No. IL 0028053)

The Chicago River, the Calumet-Sag Canal, the North Shore Channel, and the Sanitary and Ship Canal are designated as Secondary Contact and Indigenous Aquatic Life ("Secondary Contact") waters. 35 ILL. ADMIN. CODE § 303.441(g)-(h). As such, their ambient waters must meet the WQS for Secondary Contact waters, including limits for dissolved oxygen ("DO"), and the narrative offensive conditions standard. 35 ILL. ADMIN. CODE § 302 Subpart D.

The Des Plaines River (below the I-55 Bridge) and the Illinois River are both designated as General Use waters. As such, they must meet the WQS for General Use waters, including limits for DO set forth in 35 ILL. ADMIN. CODE § 302.206, and the narrative offensive conditions standard set forth at 35 ILL. ADMIN. CODE § 302.203.

The applicable WQS are as follows:

Dissolved Oxygen

The Secondary Contact WQS specify that "Dissolved Oxygen ... shall not be less than 4.0 mg/L at any time except that the Calumet-Sag Channel shall not be less than 3.0mg/L at any time." 35 ILL. ADMIN. CODE § 302.405. The General Use WQS specify DO levels that vary seasonally, at 35 ILL. ADMIN. CODE § 302.206.

Offensive Conditions Narrative Standard

The Secondary Contact offensive conditions narrative WQS specifies that waters "shall be free from unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algal growth, or unnatural color or turbidity." 35 ILL. ADMIN. CODE § 302.403. The General Use offensive conditions narrative WQS provides that waters "shall be free from sludge or bottom deposits, floating debris, visible oil, odor, plant or algal growth, color or turbidity of other than natural origin." 35 ILL. ADMIN. CODE 302.203.

VIOLATIONS

Discharges from the CAWS WWTPs and CSO outfalls are causing or contributing to violations of the applicable WQS described above, as follows:

Dissolved Oxygen Violations:

The receiving waters of the CAWS WWTP and CSO effluents, and General Use waters downstream, are in violation of the applicable DO WQS, a substantial percentage of the time.

MWRDGC Monitoring and Research Department Report Nos. 07-25, 08-39, 09-50, and 10-39, pertaining to monitoring conducted in 2006-2009, report overall non-compliance with DO WQS in the receiving waters as much as 72 percent of the time, and at some locations and time periods 100 percent of the time. The referenced Reports are available at <http://www.mwrd.org/irj/portal/anonymous/WQM> and incorporated herein by reference.

Information submitted by MWRDGC in a proceeding before the Illinois Pollution Control Board (“IPCB”), *In The Matter of Water Quality Standards and Effluent Limitations for the Chicago Area Waterways System (CAWS) and the Lower Des Plaines River*, R2008-009, demonstrates that MWRDGC CSO discharges are a substantial contributor to excursions below the applicable DO standard; and that such discharges at times drive levels of DO to zero mg/l. *See* R008-009 Testimony of Adrienne Nemura dated August 4, 2008, available at <http://www.ipcb.state.il.us/documents/dsweb/Get/Document-62134> and incorporated herein by reference.

Offensive Conditions Narrative Standard Violations

The receiving waters of the CAWS WWTP and CSO effluents are in violation of the offensive conditions narrative standard for Secondary Contact waters set forth at 35 ILL. ADMIN. CODE § 302.403. Additionally, discharges from the CAWS WWTPs are also causing violations of the General Use offensive conditions narrative standard set forth at 35 ILL. ADMIN. CODE 302.203.

There is no real doubt that the CAWS WWTPs are discharging levels of phosphorus that are causing or contributing to unnatural algal growth. Waters downstream from the CAWS WWTPs are listed by IEPA as impaired by phosphorus. In its most recent draft listing of impaired waters (“2010 Draft 303(d) List”), IEPA lists a number of CAWS and LDPR segments as potentially impaired by phosphorus, including the North Shore Channel (segment IL_G-24 and -11), Calumet-Sag Channel (segment IL_H-01), and the Sanitary and Ship Canal (segments (IL_GI-02, -03, and -06) (listings available at <http://www.epa.state.il.us/water/tmdl/303-appendix/2010/appendix-a2-303d-list-alphabetized-draft-3-26-10.pdf> and incorporated herein by reference). *See also* Letter from Kevin Pierard, USEPA Region 5, to Al Keller, USEPA, dated June 30, 2010 (Attachment 1). The 2010 Draft 303(d) List, moreover, is clearly not a complete list of waters actually impaired by phosphorus because IEPA’s current methodology only lists a water as potentially impaired by phosphorus if it has a concentration over 0.610 mg/L. This value is more than six (6) times USEPA’s suggested criterion (0.76 mg/L). *See* criteria for Aggregate Ecoregion VI, available at http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/aqlife/pollutants/nutrient/upload/2007_09_27_criteria_nutrient_ecoregions_sumtable.pdf and incorporated herein by reference, and the criteria recently developed by the State of Wisconsin to protect large rivers. Wis. Admin. Code NR

102.06(3) (Attachment 2). See Robertson, D., Weigel, B., Graczyk, D., Nutrient Concentrations and their Relations to the Biotic Integrity of Nonwadeable Rivers in Wisconsin, available at <http://pubs.usgs.gov/pp/1754>; documents used to develop the Wisconsin criteria (Attachment 3).

The Illinois River is also clearly impacted by phosphorus pollution. See Lanyon, Richard, *Impacts of Chicago Metropolitan Area Point Sources on Water Quality in the Upper Illinois Waterway* (Attachment 4) (shows phosphorus levels up to 10 times USEPA criteria in the Lower Des Plaines River and Upper Illinois River); Prefiled Testimony of Dr. Michael Lemke dated October 15, 2004 in *In the Matter of: Interim Phosphorus Effluent Standard, Proposed 35 Ill. Adm. Code 304.123(g-k)* R2004-026 (Attachment 5). See also US Geologic Survey, Water Quality in the Upper Illinois River Basin, Illinois, Indiana and Wisconsin, 1999-2001, available at <http://pubs.usgs.gov/circ/2004/1230/pdf/circular1230.pdf> and incorporated herein by reference. Much of this phosphorus comes from point sources, including the CAWS WWTPs. In David, M.B and Gentry L.E., *Anthropogenic Inputs of Nitrogen and Phosphorus and Riverine Export for Illinois, USA*, J. Environ. Qual. 29:494-508 at 501 (2000), University of Illinois scholars estimate that “47% of the total P loads in Illinois rivers were from sewerage for 1980 through 1997”; and state that “estimates of the sewerage effluent contribution to river export were 70% for the Illinois River.”

It is literally apparent that waters below the sewage treatment plants are affected by unnatural vegetative growth, algal blooms and other effects known to result from phosphorus pollution. In oral testimony given in IPCB R2008-009, Dr. Alan Burton, Director of NOAA’s Cooperative Institute for Limnology and Ecosystems Research and a Professor in the School of Natural Resources and Environment at the University of Michigan, testified in IPCB R2008-009 regarding his observation of such problems in the Lower Des Plaines River. See IPCB R2008-009 January 13, 2010 hearing transcript at 48-49, 53-45, 73-74, and January 14, 2010 hearing transcript at 22-33 (available at <http://www.ipcb.state.il.us/documents/dsweb/Get/Document-67728> and <http://www.ipcb.state.il.us/documents/dsweb/Get/Document-67743> and incorporated herein by reference) and Exhibit 380 (Attachment 6) (photograph offered in connection with Burton testimony showing algal bloom in Lower Des Plaines River).

The Chicago Watershed, which is heavily dominated by effluent from the CAWS WWTPs, has also been identified by the U.S. Geological Survey as the watershed contributing the greatest amount of both nitrogen and phosphorus to the Gulf Dead Zone. See Robertson, D. M., Schwarz, G. E., Saad, D. A., and Alexander, R. B., *Incorporating Uncertainty into the Ranking of Sparrow Model Nutrient Yields from Mississippi/Atchafalaya River Basin Watersheds*, Journal of the American Water Resources Association 45:534-39 (2009). MWRDGC WWTP discharges account for approximately 70 percent of the flow in the CAWS. The Gulf Dead Zone is a huge area in the Gulf of Mexico where fish and other aquatic life cannot live due to excess nitrogen and phosphorus from upstream sources such as the MWRDGC WWTPs.

Additionally, the MWRDGC CSOs are causing or contributing to unnatural levels of sludge and turbidity in the receiving waters. The Habitat Evaluation Report prepared for MWRDGC by Limnotech (“Limnotech Report”) states that CAWS waterways are impaired by sludge and turbidity caused in whole or substantial part by CSO events. See Limnotech Report at 23, 31, available at <http://www.ipcb.state.il.us/documents/dsweb/Get/Document-67439> and incorporated herein by reference.

Each of these violations of water quality standards represents a violation of: (1) the federal Clean Water Act, 33 U.S.C. § 1311(a); and (2) MWRDGC's NPDES permits, specifically special conditions 5 and 10 in Permit Nos. IL0028088 (North Side), IL0028053 (Stickney) and IL0028061 (Calumet).

This notice letter is based on publicly available information. Additional information, including information in MWRDGC's possession, may reveal additional violations. This letter covers all such violations occurring within five years immediately preceding the date of this notice letter.

Claimants plan to file suit against MWRDGC in federal court under the Clean Water Act, 33 U.S.C. § 1365, to secure appropriate relief for these violations. In doing so, Claimants seek to improve the water quality of the Receiving Waters by securing long-term compliance with applicable law.

Should you or your attorney wish to discuss this matter, please feel free to contact one of us at the addresses and phone numbers listed below.

Sincerely,



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