

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
WATER QUALITY STANDARDS AND)
EFFLUENT LIMITATIONS FOR THE) R08-9(b)
CHICAGO AREA WATERWAY SYSTEM) (Rulemaking – Water)
AND THE LOWER DES PLAINES RIVER:)
PROPOSED AMENDMENTS TO 35 ILL..)
ADM. CODE PARTS 301, 302, 303 and 304)

NOTICE OF FILING

To: see attached Service List

On the 3rd Day of January, 2011, I filed the Southeast Environmental Task Force's Post-Hearing Comments with the Office of the Clerk of the Illinois Pollution Control Board.

A copy of this filing is hereby served upon you.

By: 
Keith Harley, Chicago Legal Clinic/Inc.

Dated: January 3, 2011

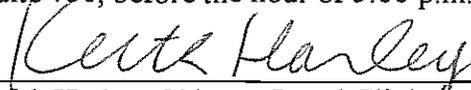
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CERTIFICATE OF SERVICE

I, Keith Harley, the undersigned attorney, hereby certify that I served the attached document -

Southeast Environmental Task Force's Post-Hearing Comments

- by depositing it in the United States Mail, postage prepaid, from 211 W. West Wacker, Suite 750, before the hour of 5:00 p.m., on this 3rd Day of January, 2011.



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The Southeast Environmental Task Force’s Post-Hearing Comments

Now comes Keith Harley of the Chicago Legal Clinic, Inc. on behalf of his client, the Southeast Environmental Task Force, and respectfully submits the following comments.

The Southeast Environmental Task Force (SETF) is a not-for-profit organization dedicated to serving the southeast side and the south suburbs of Chicago by offering public education about local environmental resources and promoting opportunities for regional sustainable development. SETF has a longstanding commitment to ensure that the Calumet waterways - including the Calumet River, Lake Calumet, the Little Calumet River, the Grand Calumet River and the Cal-Sag Channel (collectively, the Calumets) - are safe for existing and future recreational uses by its members and the public at large. Currently, these recreational uses take place in waters that receive the undisinfected effluent of the Calumet Wastewater Treatment Plant operated by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC). These comments focus on evidence now before the Illinois Pollution Control Board (the Board) establishing that the MWRDGC Calumet facility must be required to disinfect its wastewater to protect recreational users of the Calumet waterways.

The Southeast Environmental Task Force fully concurs with the unified post-hearing comments submitted by the Natural Resources Defense Council, the Environmental Law

and Policy Center, the Friends of the Chicago River, Openlands, Prairie Rivers Network the Alliance for the Great Lakes and the Sierra Club-Illinois Chapter. Consequently, it is not SETF's purpose to repeat or overlap with the post-hearing comments submitted by these organizations. Rather, SETF's purpose in these comments – as it has been throughout these proceedings – is to focus on the Calumet waterways. Indeed, SETF is unique among all parties in this proceeding in its focus on the Calumets.

By way of summary, SETF asserts that evidence now before the Board clearly establishes that the Calumets are used seasonally for public recreation and that these waterways must be protective of these uses. Contrary to this purpose, the Calumet Wastewater Treatment Plant directly discharges its pathogen-laden effluent into these recreational waters. The monitored levels of pathogens, particularly downstream of the Calumet facility, are unsafe for recreational users and inconsistent with legal mandates the Board must uphold. These unsafe conditions can be effectively remedied by requiring the Calumet facility to employ disinfection practices that are uniformly used at wastewater treatment facilities everywhere except within the Chicago Area Waterways. Mandating disinfection is the only way the Board can act consistently with the Clean Water Act, the Illinois Environmental Protection Act and the clear evidence now before it in this proceeding.

It is timely to require disinfection at the Calumet facility. The long term control plan to eliminate combined sewer overflows in the Calumet region - the local component of the Tunnel and Reservoir Project (TARP) - is now being phased in and will be complete by 2014. When the Calumet facility disinfects and local CSO events are virtually eliminated through regional TARP, there will be complete, dramatic and permanent

pathogen reductions in the Calumets, forever safeguarding these waterways for recreation.

I. The Calumets Are Used Seasonally For Public Recreation and Must Be Protective of These Recreational Uses

In its August 5, 2010 decision, the Board concluded there is clear evidence of existing recreational uses throughout the CAWS that must be protected. The Board concluded that the Calumets should be designated as Incidental Contact Recreation waters. The only exception is the Calumet River from Lake Michigan to Torrence Avenue, which is designated as a Non-Contact Recreation water.

The Board's decision was based on clear evidence of the nature and scope of recreational activities on the Calumets. The Calumet waterways flow through or adjacent to parks and residential areas and are likely to create the risk of incidental contact, particularly during the seasonal period when these waterways are used for recreation.

There are multiple recreational facilities on the Calumet waterways into which MWRDGC discharges undisinfected wastewater. There are at least 12 existing recreational facilities along the Calumet waterways, including marinas, public boat launches and a residential development that includes a boating facility. SETF Exhibit 331 is a map of these facilities, many of which are clustered immediately adjacent to the point from which MWRDGC's Calumet facility discharges undisinfected wastewater. Notably, the roster of recreational facilities has and continues to grow, including newer public boat launches in residential areas in Worth and Alsip and a new residential/marina community at Fay's Point in Blue Island.

SETF Exhibit 332 is a more detailed description of existing facilities. At least two of the facilities, the Alsip and Worth Boat Launches, are seasonal public facilities that are designed to facilitate small craft use of the Calumet waterways. Fay's Point provides access for rowing clubs to practice and compete on the Calumet waterways. Exhibit 330 at p.3. The use of the Calumets by anglers is underscored by the use of these waters for the BASS Masters Classic fishing tournament. Board Exhibits 345, 352, 358, 360 and 361 describes plans to exponentially increase the recreational uses of the Calumet waterways as part of regional redevelopment efforts. SETF's comments in Subdocket(a) included documents evidencing plans by the City of Chicago to develop a major new marina complex would be located near the existing Sunset Bay Marina.

In addition to recreational facilities that support boating, paddling and fishing, there are also several parks adjacent to the Calumet waterways into which MWRDGC discharges undisinfected wastewater. SETF Exhibit 331 shows several green-shaded parks and forest preserves adjacent to the Calumet waterways. These include the Beaubien Woods, a Cook County Forest Preserve Property that provide boating and fishing access to the Little Calumet River. Beaubien Woods is immediately adjacent to the Altgeld Gardens residential area. Whistler Woods, also a Cook County Forest Preserve Property, includes picnic facilities and is adjacent to the Cal-Sag Channel at 134th Street and Halsted in Riverdale. Approximately 6 miles of the public Palos Preserve are immediately adjacent to the Cal-Sag Channel, running along both the north and south banks of the Cal-Sag. Beaubien Woods, Whistler Woods and the Palos Preserves are public lands that are permanent points of access to the Calumet waterways for the thousands of residents who live along these waterways.

The Calumet waterways are public waters of the State of Illinois, and the use of these waters for recreation is appropriate. The Calumet Waterways are manmade or significantly altered, originally to accommodate commercial barges and ships. However, as evidenced by SETF Exhibit 333, all of these waterways are designated as public bodies of water that must be open to members of the public throughout their entire length.

II. The Monitored Levels of Indicator Bacteria and Pathogens Downstream of the Calumet Wastewater Treatment Plant Are Unsafe for Recreational Users and Inconsistent With Legal Mandates the Board Must Uphold

During all weather conditions, the levels of fecal coliform and e-coli downstream of the Calumet wastewater treatment plant main discharge 001 are incompatible with the recreational uses of the Calumet waterways. By contrast, the levels of fecal coliform and e-coli upstream of the Calumet facility are extremely low.

SETF Exhibit 334 is derived from the MWRDGC website, and identifies water quality monitoring stations throughout the entire Chicago region. SETF Exhibit 335 identifies and maps the water quality monitoring stations along the Calumet waterways. SETF Exhibit 336, also derived from information available on the MWRDGC website, tracks five years of monitored levels of fecal coliform sequentially from the easternmost monitoring station (49) to the westernmost (43) near the terminus of the Cal-Sag Channel. SETF Exhibit 337 tracks the monitored levels of e-coli at the same locations. Main discharge 001 from the MWRDGC Calumet facility is located between sampling location 56 (Indiana Avenue) and sampling location 76 (Halsted Street).

The impact of undisinfected effluent from Calumet facility main discharge 001 is dramatically in evidence in this data. Levels of fecal coliform in waters upstream of main

discharge rarely exceed 400 cfu/100 mL. In almost five years of monthly data for the three sample locations upstream of main discharge 001, there are only 7 samples out of 177 that evidence a fecal coliform level in excess of 400 cfu/100 mL. By contrast, virtually every sample downstream from main discharge 001 exponentially exceeds 400 cfu/100mL. Notably, the levels are highest in the same area where recreational facilities are clustered. There are only 8 samples out of 108 taken at the Halsted and Ashland monitoring locations that are less than 400 cfu/100mL, with most levels in excess of 1,000cfu/mL, and many in excess of 10,000cfu/mL. As evidenced by SETF Exhibit 337, the same pattern is repeated for e-coli. This is an unmistakable indication of the effect of the undisinfected effluent of the Calumet Wastewater Treatment Plant on the Calumet waterways. It is based on MWRDGC's own monitoring data, acquired over several years. And, as MWRDGC General Superintendent Richard Lanyon testified, "...our effluents don't normally flow upstream." TR. 09/08/08 a.m. at 102.

A similar conclusion was reached by U.S. EPA in its 2002 analysis of geometric mean fecal coliform levels in the Little Calumet River and the Cal-Sag Channel, as reflected in a chart incorporated into Dr. Marilyn V. Yates' Pre-Filed Testimony at 6-7, Figure 2. The geometric mean of fecal coliform upstream of the Calumet facility was less than 200 cfu/100mL, was 8,231 cfu/100mL at the facility main discharge point and remained above 1,500 cfu/100mL 1.3 miles downstream of the main discharge. Id. The effects of facility effluent are still evident at monitoring locations 2.3 and 6.3 miles downstream. Id.

The uncontrolled discharge of pathogens from the Calumet Wastewater Treatment Plant, and resulting downstream levels of pathogens, are incompatible with the actual use of the Calumet waterways for incidental contact recreation.

Pursuant to Title 35 of the Illinois Administrative Code, Section 378.202, any waters “which flow through or adjacent to parks or residential areas and are likely to create a risk of incidental or accidental contact” are considered seasonally protected waters. The maximum compliance standard in such waters for fecal coliform is 200cfu/100 mL during the months of May through October, as governed by 35 Ill. Adm. Code 302.209(a). The Board has already concluded that the Calumet waterways are used for recreational uses where there is a risk of incidental contact. The record before the Board contains substantial, uncontradicted evidence that the Calumet waterways flow through and adjacent to parks and residential areas. Under these circumstances, the standard for seasonally protected waters applies. In turn, as revealed by years of MWRDGC’s own monitoring data, this standard cannot be achieved with requiring disinfection at MWRDGC’s Calumet Wastewater Treatment Plant.

Even if the Board concludes the Calumet waterways are not seasonally protected waters within the meaning of 35 IAC 302.202, it still must conclude that disinfection is required at the Calumet facility. Even if the Calumet waterways are not within the definition of seasonally protected waters, these regulations provide clear guidance to the Board as to the appropriate standard to protect incidental contact recreation. Moreover, pursuant to 35 IAC 302.105:

“Uses actually attained in a surface water body or water body segment on or after November 28, 1975, *whether or not they are included in the water quality*

standards, must be maintained and protected. Examples of degradation of existing uses of the waters of the state include...(3) an action that would preclude the continued use of a surface water body or water body segment for a public water supply or for recreational or commercial fishing, swimming, paddling or boating.” (*emphasis added*).

The levels of pathogens in the effluent of the Calumet facility jeopardize the safety of recreational users of these waterways.

Several parties in this proceeding have devoted significant resources to characterizing health impacts on recreational users that can be attributed to pathogens discharged by MWRDGC’s facilities. SETF fully concurs with the unified comments prepared by the environmental organizations regarding the public health impacts of these pathogens. Rather than repeat these comments, SETF wishes to emphasize four points that it believes should be given weight in the Board’s deliberative process.

First, a review of the monitored levels of fecal coliform and e-coli in the Calumet waterways demonstrates the futility of any attempt to characterize the risks posed by exposure to pathogens in the absence of an effluent standard. The levels of fecal coliform at the two monitoring locations immediately downstream of the Calumet facility are as high as 15,000 cfu/100mL (76 - Halsted, October, 2004), 25,000 cfu/100mL (57 - Ashland, August, 2004) and 220,000 cfu/100mL (57- Ashland, September, 2004). Levels of 13,000 cfu/100mL and 66,000 cfu/mL have been detected in monthly samples during periods of seasonal recreation. There are similar extremely high levels of e-coli. Yet, to date, the MWRDGC asserts it should not be subject to any limit based on disinfection, which is to say, it should be allowed to emit any volume of any pathogen into any

waterway during any time of the year without regard for how that that waterway is being used. Correspondingly, MWRDGC is asking the Board to accept its risk characterizations without offering any outer boundary on the most important variable in characterizing risk in an effluent-dominated waterway – the volume of pathogens it is loading into the waterways. This suggests the entire risk characterization exercise put forward by MWRDGC is fundamentally flawed.

Second, even if the Board were to give great weight to the CHEERS and Geosyntech risk characterizations, there is a clear cause for regulatory activity. It is notable that the MWRDGC-sponsored CHEERS study identifies a statistically significant increased rate of eye illnesses for recreational users of the CAWS by comparison to their counterparts recreating in general use waters and to non-recreators. TR. 10/19/10 a.m. at 124, 138; see also CHEERS Report at xxxviii, IX-43 et seq. CAWS users are 15.5 times more likely to develop eye itching, crusting, redness and irritation than their counterparts who recreate in general use waters or don't engage in water recreation. Id. These reported eye symptoms result from eye infections, irritations and allergic responses. TR. 10/19/10 a.m. at 124-125, 138. MWRDGC cannot urge the Board to discount this finding while at the same time touting the credibility of aspects of CHEERS more to its liking. Similarly, CHEERS found 12.5 more cases of GI illness per 1,000 CAWS users by comparison to their counterparts who do not engage in water recreation. TR. 10/19/10 a.m. at 124; see also CHEERS Report at V-1 et seq. MWRDGC cannot discount these increased levels of gastrointestinal illness simply by comparing incidents of GI illness among CAWS users to illnesses reported by users of general use waters. There may be completely different reasons why users of the CAWS and, for example, users of Lake Michigan beaches

develop gastrointestinal illness, although both rates may be comparable during any study period. Clearly, U.S. EPA believes the rate of gastrointestinal disease among CAWS users provides a clear basis for regulatory action. See: PC #561, 12/27/10

Correspondence from Tinka G. Hyde, Director, Water Division, U.S. EPA Region 5, to Illinois Pollution Control Board, asserting: *"It is important to note that the gastrointestinal illness rate in the water recreation group, approximately 13 illnesses reported per 1000 recreators, is greater than EPA's recommendation of 8 to 10 illnesses per 100 recreators in fresh waters."* *"[I]t does not appear that the observed risk levels in CHEERS represent the full or future level of health risk to recreators in the CAWS."*

"Comparing the illness rates between CAWS and G UW is ill-advised."

Third, there are no barriers preventing boaters from having direct access to the points at which MWRDGC is discharging pathogen-laden wastewater. TR. 9/08/08 a.m. at 105. In fact, MWRDGC's General Superintendent asserts creating such a protective barrier would constitute an unallowable obstruction to navigation. Id. At the same time, the General Superintendent testified the fecal coliform level in MWRDGC effluent (prior to dilution in the receiving water) ranged from 10,000 to 200,000 cfu/100mL. TR. 9/08/08 a.m. at 61-63. The risks posed by proximity to these accessible yet highly polluted locations were not captured in the Geosyntech assessment. Dr. Petropolou testified that for safety reasons the sampling crews did not go close to the outfalls. TR. 9/10/08 a.m. at 7-8. As a result, the sample for the Calumet outfall was taken at Halsted, which Dr. Petropolou estimated to be 1.1 miles downstream. Id. at 9-11; see also TR. 09/23/08 p.m. at 125, Dr. Dorevitch would not recommend contact with effluent at the outfall.

Fourth, SETF asserts the threshold for regulatory activity is much simpler than the extensive record in this case suggests. MWRDGC's facilities are sources that discharge pathogens into the CAWS. Pathogens are pollutants within the meaning of the Clean Water Act and the Illinois Environmental Protection Act. The Board concluded the CAWS are used for recreation and, consistent with mandates that originate in the Clean Water Act, that these waters must be protective of these uses. Recreational users of the CAWS are at risk of exposure to disease-causing pathogens through ingestion and body surface contact. The threshold for regulatory activity is met and exceeded by these unassailable facts, well-established in this rulemaking. While it may be interesting (and expensive and time consuming) to characterize the rate and severity of the illnesses developed by these recreational users using surveys, predictive models and expert opinions, ultimately, establishing illness occurrences is not required as an element to justify regulatory activity. Moreover, even with the kinds of resources provided by MWRDGC, the daunting task of finding or discounting actual illness invariably leads to decisions that jeopardize the credibility of the entire undertaking, to wit:

- the Geosyntech choice to focus on only 8 of 160-200 pathogens known to be associated with sewage (TR. 9/09/08 p.m. at 33, 38-40; see also Dr. Peter Orris Pre-Filed Testimony at 4, footnote 1);
- the decision not to include users of the Chicago Sanitary and Ship Canal in CHEERS (TR. 10/19/10 a.m. at 103-104);
- the failure to include rowing teams that routinely use the Cal-Sag Channel in CHEERS (TR. 10/19/10 a.m. at 92, 94-95);

- the decision not to include the Grand Calumet in the Geosyntech analysis (TR. 9/10/08 p.m. at 123);
- the inability of CHEERS to characterize asymptomatic infection (TR. 9/23/08 p.m. at 79 and 84; see also Yates Pre-Filed Testimony at 15, 27; Gorelick Pre-Filed Testimony at 10);
- the decision to exclude secondary infections in individuals beyond immediate family members living in the same household as the infected recreator, in the Geosyntech analysis (TR. 9/10/08 a.m. at 86-87);
- the inability of the Geosyntech analysis to account for the potential increased severity of health effects on sensitive populations, estimated to be 25-35% of the population (TR. 09/09/08 p.m. at 61-63);
- the decision of Dr. Dorevitch and MWRDGC representatives to attempt to downplay the medical significance of eye illnesses (9/20/2010 Pre-Filed testimony of Thomas Granato at 4; also TR. 10/19/10 a.m. at 127 and 135-36, but note, Dorevitch on cross-questioning ultimately acknowledges that these illnesses can be medically significant, see p. 138) ;
- the inability of CHEERS to characterize the possibility of epidemic (versus endemic) disease outbreaks (TR. 09/24/08 a.m. at 73-75);
- the decision to exclude respiratory illnesses from the Geosyntech analysis (TR. 5/05/09 p.m. at 80 and 82-84; see also TR. 09/09/08 p.m. at 92 - it is unclear how much water is aerosolized, and thus able to be inhaled, during water recreation); and, perhaps most inexplicably,

- the decision to characterize a CAWS water sample as taken during a wet weather event even if rain only occurred the day after the sample was taken (TR. 09/25/08 p.m. at 31-37).

Although all of these choices cause the nature and extent of illness to be underestimated, assuming *arguendo* that they were all made in good faith, they simply underscore the extreme difficulty of accurately characterizing illness. For its part, SETF questions not only the difficulty of this undertaking, but also its value. SETF urges the Board to establish a proactive, precautionary regulation, avoiding any intimation that illness must occur and be demonstrated in order to justify the exercise of the Board's regulatory authority to protect public health, safety and welfare.

III. Unsafe Conditions Can Be Effectively Remedied by Requiring the Calumet Facility To Employ Disinfection Practices That Are Uniformly Used At Wastewater Treatment Facilities Everywhere Except Within the Chicago Area Waterways

Non-disinfected effluent from MWRDGC's facilities in the CAWS contain from 10,000 to 200,000 cfu/100mL. TR. 9/08/08 a.m., 61-63. By contrast, MWRDGC's three facilities located in the northwest part of Cook County – the Egan, Hanover Park and Kirie plants – emit effluent with “near zero” fecal coliform. TR. 9/08/08 a.m., 65-66. According to Richard Lanyon, General Superintendent of the MWRDGC, the reason MWRDGC disinfects at Egan, Hanover Park and Kyrie is to protect the quality of the receiving waters (“...under Illinois rules, these waters require seasonal disinfection and you must meet a bacterial water quality standard. That's why we practice disinfection at those three plants.”). *Id.* at 66. In keeping with this approach, when Illinois regulations mandated bacteria controls to protect the CAWS, the Stickney, Calumet and North Side

plants disinfected their effluent. TR. 9/08/08, p.m. at 24-27. Although the Egan, Hanover Park and Kyrie plants are smaller than their CAWS counterparts, the reason for disinfecting at these plants is not related to their size, but instead, to comply with regulatory standards. TR. 9/08/08 a.m. at 68-69.

The three MWRDGC facilities that currently disinfect are using a chlorination and dechlorination system commonly used at POTWs. TR. 09/08/08 a.m. at 71. Accordingly, as its General Superintendent testified, MWRDGC regards this as a feasible technology for disinfection. TR. 09/08/08 a.m. at 84. MWRDGC also regards UV disinfection as a feasible technology. Id. As early as 2008, MWRDGC was conducting pilot tests for UV disinfection at the Egan, Hanover Park and Kirie plants. TR. 09/08/08 a.m. at 85. During his testimony, Superintendent Lanyon could not think of any reason to believe UV disinfection would be infeasible on the scale of the larger facilities discharging into the CAWS. TR. 09/08/08 a.m. at 87-88.

Despite the technical feasibility and widespread use of disinfection, MWRDGC has argued that requiring disinfection at the Calumet and other MWRDGC CAWS facilities is a worthless act because of pathogen loading from combined sewer overflows during wet weather events. On its face, this argument should be discounted by the Board. MWRDGC's CSO argument does not apply to dry weather periods when virtually 100% of the flow in the CAWS is effluent from a MWRDGC facility. Lanyon, Pre-Filed Testimony at page 5; see also, TR. 9/08/08 a.m. at 48. MWRDGC witness Dr. Tolson honestly acknowledged that under dry weather conditions, disinfection would essentially eliminate pathogen risk. TR. 9/09/08 p.m. at 69. During wet weather events, even if there are combined sewer overflows, the Calumet facility still operates and is a source of

pathogen-laden effluent. The Calumet facility does not need to be the only source of pathogens to be subject to the obligation to control its polluted effluent. MWRDGC's CSO argument is also mistaken in light of its legal obligations to complete its long term control plan to eliminate CSO events. In the foreseeable future in the Calumet region, MWRDGC will fulfill its legally-mandated long term control plan to virtually eliminate CSOs into the Calumet waterways by completing the Tunnel and Reservoir Plan in the Calumet region. As TARP continues to be phased in and is completed by MWRDGC, the sole source of pathogen-laden effluent will be the Calumet facility, underscoring the critical importance of requiring disinfection at this source.

A careful review of the NPDES permit for the Calumet facility further demonstrates that MWRDGC's argument is mistaken. MWRDGC is required to control both the Calumet facility and the 13 CSOs that are part MWRDGC's regional collection system. SETF Exhibit 409, NPDES Permit No. IL0028061, page 9, "Special Condition 10 – Authorization of Combined Sewer and Treatment Plant Discharges; see also SETF Exhibit 410, draft NPDES Permit No. IL0028061, page 11, "Special Condition 13 – Authorization of Combined Sewer and Treatment Plant Discharges". MWRDGC is prohibited from allowing overflows during dry weather events, meaning the Calumet facility is the sole source of pathogen-laden effluent into the Calumets during these periods of time. SETF Exhibit 409, Calumet NPDES Permit, p. 9.

During wet weather events, CSO overflows can be an additional source of pathogen loading into the Calumet waterways. However, the situation during wet weather events is far more complex than MWRDGC has disclosed during these proceedings. MWRDGC must direct "the first flush of storm flows to the main STP" [sewage treatment plant]

during wet weather events. Id. MWRDGC must also ensure that: “Additional flows, but not less than ten times the average dry weather flow for the design year, shall receive the equivalent of primary treatment and disinfection with adequate retention time.” Id.

During all weather conditions, MWRDGC must optimize the transport and treatment of wastewater flows. Id. During all weather conditions, MWRDGC is subject to the following permit requirement related to CSOs:

10. Pursuant to Section 301 of the deferral Clean Water Act and 40 CFR 122.4, discharges from the outflows listed in the Special Condition shall not cause or contribute to violations of applicable water quality standards *or cause use impairment in the receiving waters.* Id. at 10 (emphasis added).

A careful review of the NPDES permit for the Calumet facility demonstrates that the line between dry weather and wet weather is far more complex than MWRDGC (or Geosyntech) has suggested. MWRDGC is responsible for treatment of all wastewater at the Calumet facility during dry weather and during the initial stages of wet weather events. It must treat wastewater - up to a capacity of not less than ten times the average dry flow - to the point of primary treatment and disinfection. MWRDGC has a pre-existing responsibility to ensure CSO discharges do not cause use impairment. Simply, MWRDGC cannot credibly assert it is a passive victim of combined sewer overflows during wet weather events. Under its permit, MWRDGC is legally obligated to operate its CSO system during dry and wet weather conditions in such a way to control overflows according to a carefully defined protocol. MWRDGC's control over this system will become even more complete when regional TARP is fully implemented in 2014.

IV. It is Timely To Require Disinfection At The Calumet Facility

In order to align with regional TARP, it is particularly important for the Board to impose a schedule for the installation of disinfection equipment to control pathogens from the Calumet Wastewater Treatment Plant. According to the TARP component of the Long Term Control Plan, the final, major piece of TARP for this region – the Thornton Quarry Reservoir – will be completed by 2014. SETF Exhibit 409 at 15; SETF Exhibit 410 at 16; TR. 09/08/08 a.m. at 32; see also MWRDGC General Superintendent Lanyon's testimony "...we anticipate the Thornton Reservoir, which would benefit the Little Calumet River and the Calumet-Sag Channel, is scheduled to be completed in 2014..." TR. 9/08/08 a.m. at 56. Despite the near term completion of TARP, Drs. Petropolou, Tolson and Gerba expressed ignorance about TARP and its effects, and did not include TARP in developing their analyses or testimony. TR. 10/10/08 a.m. at 19.

Once completed, the regional TARP will have the capacity to virtually eliminate wet weather overflows into the Calumet waterways. TR. 09/08/08 a.m. at 76, CSO events could be reduced to 1 or 2 a year throughout the entire CAWS. Instead, during wet weather events, the wastewater will be stored until it can be treated at the Calumet wastewater treatment plant. Wet weather discharges from CSOs should be virtually eliminated; conversely, main discharge 001 at the Calumet facility will become the sole point of wastewater discharge into the Calumet waterways. If disinfection at this point is required by 2014, and CSO overflows are virtually eliminated through the completion of the regional TARP, pathogen loading and levels in the Calumet waterways will be dramatically and permanently reduced. In the absence of a schedule to install disinfection at the Calumet facility by 2014, the consequence of a fully executed TARP

will be to direct all undisinfected wastewater through this point of discharge, immediately adjacent to multiple public recreational facilities. Without disinfecting at the Calumet facility, the predictable effect of TARP will be to increase pathogen loading in the midst of recreational waters. This perverse result can only be avoided if disinfection at the Calumet facility coincides with the completion of TARP, no later than 2014. For this to occur, the Board must impose a schedule for accomplishing wastewater disinfection at the Calumet facility no later than 2014.

V. In Light of the Evidence Now Before the Board, It Must Mandate Disinfection at MWRDGC's Calumet Wastewater Treatment Plant In Order To Comply With The Clean Water Act and The Illinois Environmental Protection Act

Illinois is under a non-discretionary duty originating in the Clean Water Act to assess Illinois waters to ensure these waters are safe for the people and wildlife using them, now and in the future, until the waters are fully fishable and swimmable. 33 U.S.C. §1313(c)(1); 40 CFR 131.10(j)(1). In fulfillment of this duty, IL EPA engaged in a years-long, multi-stakeholder process to assess the present and attainable uses of the CAWS, concluding that uses of the CAWS have changed since these waters were originally classified decades ago. New recreational uses trigger a Clean Water Act-based mandate to ensure the CAWS are safe for these uses. 33 U.S.C. §1313(c)(2)(A); 40 CFR §131.10(i). MWRDGC's wastewater treatment plants are sources of pathogens into waters that are being used for recreation. Disinfection is almost uniformly employed at POTWs in Illinois and throughout the United States to control these kinds of pathogens. Consequently, it is difficult to afford any value to MWRDGC's broad claims that

disinfection is technically infeasible or will result in substantial and widespread economic and social impact.

From SETF's perspective, IL EPA's proposal designates the uses for which the CAWS shall be maintained and protected, identifies the pollutants that are inconsistent with these uses, and establishes effluent standards to limit the sources of these pollutants by requiring them to employ well-established technology. In doing so, IL EPA is acting well within its legal mandate under both federal and Illinois law. 35 Ill. Adm. Code 301.102; see also 33 U.S.C. §1370.

VI. Conclusion

For the foregoing reasons, the Southeast Environmental Task Force respectfully urges the Illinois Pollution Control Board to require the Metropolitan Water Reclamation District to disinfect the effluent discharged by its Calumet Wastewater Treatment Plant into Calumet waterways. The Southeast Environmental Task Force respectfully asserts that this is the only way the Illinois Pollution Control Board can act consistently with the evidence in this case and with legal requirements.

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