

EXHIBIT LIST

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STATE OF ILLINOIS
Pollution Control Board

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

- Exhibit 1 Prefiled testimony of Rob Sulski
- Exhibit 2 Prefiled testimony of Scott Twait
- Exhibit 3 Prefiled testimony of Roy Smogor
- Exhibit 4 United States Environmental Protection Agency letter from Linda Holst to Toby Frevert of the Illinois Environmental Protection Agency, dated May 3, 2007
- Exhibit 5 Appendix Table 1.QHEI metric scores for stations sampled in the Illinois and DesPlaines Rivers during 2006
- Exhibit 6 Table 2. QHEI scores and metric values for sites sampled in the Des Plaines & Illinois Rivers by MBI in 2006
- Exhibit 7 MBI Qualitative Habitat Evaluation Index Field Sheet QHEI Score (contains 23 pages)
- Exhibit 8 "Quality Assurance Project Plan: Fish Assemblage Assessment of the Lower Des Plaines River" Effective Date July 1, 2006, Center of Applied Bioassessment & Biocriteria P.O. Box 21561 Columbus, OH 43221-0561
- Exhibit 9 Publication: HERALD-NEWS, Publication date: 8/19/2002 "Fishermen died by drowning"
- Exhibit 10 Three Rivers Manufacturers' Association letter to Toby Frevert dated June 6, 2003
- Exhibit 11 United States Environmental Protection Agency MEMORANDUM on "Improving the Effectiveness of the Use Attainability Analysis (UAA) Process" from Ephraim S. King to Regional Water Division Directors. Dated March 13, 2006

- Exhibit 12 “Review of ‘Technical Memorandum 1WQ-Disingection Evaluation Prepared on Behalf of the Metropolitan Water Reclamation District of Greater Chicago’ Prepared for United States Environmental Protection Agency by Science Applications International Corporation
- Exhibit 13 Prefiled testimony of Chris O. Yoder
- Exhibit 14 *Curriculum Vitae* of Chris Yoder
- Exhibit 15 “Temperature Criteria Options for the Lower Des Plaines River” Final Report to United States Environmental Protection Agency and Illinois Environmental Protection Agency by Chris Yoder and Edward Rankin
- Exhibit 16 “Re-evaluation of the Technical Justification for Existing Ohio River Mainstem Temperature Criteria” Chris Yoder, Brian Armitage and Edward Rankin
- Exhibit 17 “Thermal Discharge form a Nuclear Power Plant: Predicted Effects on Lake Erie Fish” Jeffrey Reutter and Charles Herdendorf
- Exhibit 18 Pages 2-98 through 2-102 from the Lower Des Plaines Use Attainability Analysis (Attachment A to proposal)
- Exhibit 19 Table 1. Number, CPE (no./km) and Relative Abundance of all Fish Taxa Collected Electrofishing from the Lower Dresden Pool
- Exhibit 20 MBI Fish Data Sheet (contains 35 pages)
- Exhibit 21 Table 1 Boat IBI scores and metrics at boat sites in the Des Plaines River sampled by MBI during 2006
- Exhibit 22 R08-9 Illinois Pollution Control Board hearing Question for the Illinois EPA (2-1-08)
- Exhibit 23 “Illinois Waterway Navigation Charts” Map Nos. 94-114.
- Exhibit 24 “White Sucker (*Catostomus commersoni*) Embryo Development, and Early Growth and Survival at Divergent Temperatures” by J. Howard McCormick, Bernard R. Jones and Kenneth E.F. Hokanson
- Exhibit 25 Map entitled “Chicago Area Waterway System and Des.Plaines River UAA Segments”
- Exhibit 26 Map entitled “Proposed Aquatic Life Use Designation”
- Exhibit 27 Map entitled “Proposed Recreational Use Designation”

- Exhibit 28 Metropolitan Water Reclamation District of Greater Chicago table entitled "Total Number of Fish Collected from Each Sampling Station in the Chicago Area Waterway System from 2001 through 2005 as part of the ambient Water Quality Monitoring Program"
- Exhibit 29 UAA Factor Application to the Lower Des Plaines River and CAWS
- Exhibit 30 U.S. Army Corps of Engineers Maps of Illinois Waterway, Map Nos. 109,110, 111
- Exhibit 31 Illinois Department of Natural Resources Lake Michigan Tributaries Fish Population Survey, July 27-31, 2006
- Exhibit 32 Qualitative Habitat Evaluation Index Scores in the Upper Dresden Island Pool of Des Plaines River
- Exhibit 33 Edits to the Lower Des Plaines UAA (Attachment A to the IEPA's Statement of Reasons)
- Exhibit 34 Information on Impaired Segments of the Lower Des Plaines River and the CAWS
- Exhibit 35 "Evaluation and Development of Large River Biological Assessment Methods and Standardized Protocols for Region V" by Rob Tewes, Erich Emery, and Jeff Thomas
- Exhibit 36 Meeting Minutes from the Lower Des Plaines River Workgroup and the CAWS Stakeholders Group
- Exhibit 37 Compact disc titled "Yoder CD"
- Exhibit 38 Metropolitan Water Reclamation District of Greater Chicago, Research and Development Department Report No. 03-20 "Comparison of Fecal Coliform concentrations and Trends in Two Urban Rivers: The Chicago Sanitary and Ship Canal and The Des Plaines River" October 2003
- Exhibit 39 Metropolitan Water Reclamation District of Greater Chicago, Research and Development Department Report No. 04-10 "Estimation of the Escherichia Coli to Fecal Coliform Ratio in Wastewater Effluents and Ambient Water of the Metropolitan Water Reclamation District of Greater Chicago" July 2004
- Exhibit 40 Chart titled "Illinois Department of Natural Resources DuPage River Basin Survey Stations"

- Exhibit 41 Chart titled “Illinois Department of Natural Resources Fish Community Sampling Results and Index of Biotic Integrity (IBI), 2003 Des Plaines Basin Survey - mainstream stations”
- Exhibit 42 Chart titled “Illinois Department of Natural Resources Fish Community Sampling Results and Index of Biotic Integrity (IBI), 2003 Des Plaines Basin Survey - tributary stations (includes data from 2002 surveys)”
- Exhibit 43 Chart titled “Illinois Department of Natural Resources - Fisheries Division Kankakee River Fish Population Survey Results - July, 2005”
- Exhibit 44 “The Des Plaines River: Monitoring the Fish Resources of an Urban River (1978-1990) by David M. Day August 12, 1991
- Exhibit 45 Table with headers “Name”, “10-Digit HUC”, “IEPA Basin”, “Assessment Unit ID”, “Size (miles)”, “Cat.”, “Designated Uses/Attainment”, “Causes”, “Sources”
- Exhibit 46 Compact Disc titled “MWRDGC continuous DO and temp data for selected CAW stations”
- Exhibit 47 Group of letters from Metropolitan Water Reclamation District of Greater Chicago starting with letter to Michael Garretson, dated August 18, 2006 on reported fish kills
- Exhibit 48 Group of tables beginning with table titled “Metropolitan Water Reclamation District of Greater Chicago Ambient Water Quality Monitoring Program Sample Stations”
- Exhibit 49 Letter to Toby Frevert of IEPA from Linda Holst USEPA dated May 3, 2007
- Exhibit 50 Draft comments from Midwest Generation dated 02/12/07 at bottom
- Exhibit 51 Metropolitan Water Reclamation District of Greater Chicago Comments on IEPA Chicago Area Waterways Use Attainability Analysis Draft Standards dated March 16, 2007
- Exhibit 52 IEPA document titled “Chicago Waterway/Lower Des Plaines River UAA Major issues related to comments from March 20, 2007 meeting in Joliet
- Exhibit 53 Environmental Law & Policy Center comments to Toby Frevert on Use Attainability Analyses for the lower Des Plaines and the Chicago Waterway System, dated April 6, 2007
- Exhibit 54 email from Phillip Moy to Toby Frevert dated 3/23/2007

- Exhibit 55 Alliance for the Great Lakes “Protecting Public Health, Caring for Chicago’s Waters”
- Exhibit 56 Group of documents with email cover sheet from Deana Poe to CAWS UAA; UAA - Des Plaines dated January 26, 2007.
- Exhibit 57 “Reconnaissance Report Great Lakes Navigation System Review Appendix D- Chicago Sanitary & Ship Canal” Army Corp of Engineers, June 2002
- Exhibit 58 Settlement Agreement between Natural Resources Defense Council and USEPA, and the National Association of Clean Water Agencies
- Exhibit 59 Letter from Louis Kollias, Director Research and Development, MWRDGC, to Marcia Willhite, Bureau Chief, IEPA, dated September 5, 2008
- Exhibit 60 Prefiled Testimony of Richard Lanyon
- Exhibit 61 Attachment 1 Openlands Questions, color photos
- Exhibit 62 Prefiled Testimony of William J. Stuba
- Exhibit 63 Table entitled “Annual Summaries of Recreational Activities Observations”
- Exhibit 64 Trip Log dated 7-16-08, Patrol CAL DO NPDES
- Exhibit 65 Prefiled Testimony of Samuel G. Dennison on Recreational Designations
- Exhibit 66 Color Photo of Barge on Calumet-Sag Channel looking west from 104th Street Bridge
- Exhibit 67 email from Fredric Andes to Marie Tipsord and Susan Hedman listing links to MWRDGC’s 2007 and 2008 budget books
- Exhibit 68 Prefiled Testimony of Chriso Petropoulou
- Exhibit 69 Prefiled Testimony of Charles P. Gerba
- Exhibit70 Prefiled Testimony of Keith Tolson
- Exhibit 71 Report prepared for MWRDGC by Geosyntec entitled “Dry and Wet Weather Risk Assessment of Human Health Impacts of Disinfection vs. No Disinfection of the Chicago Area Waterways System” April 2008
- Exhibit 72 “Dry Weather Risk Assessment of Human Health Impacts of Disinfection vs. No Disinfection of the Chicago Area Waterways System” Review conducted fro US EPA Region 5, Office of Water

- Exhibit 73 Compact Disc titled USEPA Correspondence
- Exhibit 73a Compact Disc that is attachments to USEPA Correspondence
- Exhibit 74 “Health Effects of white-water canoeing” by L. Fewtrell *et al*, from *The Lancet* dated June 27, 1992 (cover page)
- Exhibit 75 Table 1 entitled “Illnesses acquired by ingestion of water”
- Exhibit 76 Report prepared for MWRDGC by Geosyntec entitled “Interim Phase I Dry Weather Risk Assessment Human Health Impacts of Disinfection vs. No Disinfection of the Chicago Area Waterways System” November 2006
- Exhibit 77 Compact Disc entitled “Appendices” “Dry and Wet Weather Risk Assessment of Human Health Impacts of Disinfection vs. No Disinfection of the Chicago Area Waterways System” April 2008
- Exhibit 78 Cover page and one page excerpt from “Environmental Microbiology” by Maier, Pepper, and Gerba
- Exhibit 79 “The Health Effects of Low-Contact Water Activities in Fresh and Estuarine Waters” by Fewtrell *et al*. February 1994
- Exhibit 80 “Bathroom research reveals surprising data” by Amanda Riddle June 11, 1997
- Exhibit 81 MSNBC.com Interview “Is your workplace a bacteria cafeteria” Feb. 16, 2005
- Exhibit 82 Openlands Attachment 1 to Prefiled Question of Keith Tolson, color photo
- Exhibit 83 “Lease Amendment Agreement Ronan Park Expansion” September 19, 1990
- Exhibit 84 Table entitled “Summary of Recreational Season (Chlorinate/Dechlorinated) Effluent Fecal Coliform May 1 through October 31”
- Exhibit 85 Compact Disc entitled “Raw Data”
- Exhibit 86 USEPA Document entitled “Ambient Water Quality Criteria for Bacteria - 1986” EPA440/5-84-002 (January 1986).
- Exhibit 87 Color Photo of two-person Jet Ski
- Exhibit 88 September 12, 2008 letter from Chriso Petropoulou of Geosyntec to Thomas Grant of Metropolitan Water Reclamation District of Greater Chicago

- Exhibit 89 September 22, 2008 letter from Chriso Petropoulou of Geosyntec to Thomas Grant of Metropolitan Water Reclamation District of Greater Chicago
- Exhibit 90 September 22, 2008 letter from Louis Kollias of Metropolitan Water Reclamation District of Greater Chicago to Marcia Wilhite of the Illinois Environmental Protection Agency
- Exhibit 91 Twelve tables beginning with "Jan. 2005 Daily Precipitation Counts (inches)" one table for each month
- Exhibit 92 Eight tables beginning with "Jan. 2006 Daily Precipitation Counts (inches)" one table for each month through October
- Exhibit 93 Prefiled testimony of Earnest R. Blatchley III, with attachments included on compact disc
- Exhibit 94 California Health Laws Related to Recycled Water "The Purple Book" Excerpts from the Health and Safety Code, Water Code and Titles 22 and 17 of the California Code of Regulations June 2001 Edition
- Exhibit 95 Color Chart entitled "Facility D - -St. Petersburg 2° without Nitrification; Filtration"
- Exhibit 96 Article entitled "Wedeco Wins Order In Munich"
- Exhibit 97 Article entitled "Rinsend (SBR) Wastewater Treatment Plant Overview"
- Exhibit 98 Article entitled "Effects of Disinfectants on Wastewater Effluent Toxicity" by Earnest R. Blatchley III *et al. Pergamon 1997*
- Exhibit 99 Article entitled "Effect of Wastewater Disinfection on Human Health" by Earnest R. Blatchley III
- Exhibit 100 Prefiled testimony of Samuel Dorevitch with compact disc of attachments
- Exhibit 101 "Health Effects of white-water canoeing" by L. Fewtrell *et al.*, from *The Lancet* dated June 27, 1992 (complete copy)
- Exhibit 102 Article entitled "Bacteriophages are a Better Indicator of Illness Rates than Bacteria Amongst Users of a White Water Course Fed by a Lowland River" by J.V. Lee *et al. Pergamon 1997*
- Exhibit 103 Article entitled "A Probabilistic Risk Assessment of Cryptosporidium Exposure Among Baltimore Urban Anglers" by Jennifer D. Roberts *et al. Journal of Toxicology and Environmental Health, Part A* (January 1, 2007)

- Exhibit 104 Article entitled "Health Hazards Associated with Windsurfing on Polluted Waters" by Eric Dewailly *et al.* *Public Health Briefs* June 1986
- Exhibit 105 Article entitled "Results of the First Pilot-Scale Controlled Cohort Epidemiological Investigation into the Possible Health Effects of Bathing in Seawater at Langland Bay, Swansea" by F. Jones *et al.* (February 5, 1991)
- Exhibit 106 Two color charts on one page entitled "CAWS activity distribution, 2007 n=350" and "GUW activity distribution, 2007 n=142"
- Exhibit 107 Two pages with three Figures, Figure 1 entitled "Aged distribution of unexposed participants, 2007", Figure 2 entitled "Aged distribution of CAWS participants, 2007" and Figure 3 entitled "Aged distribution of GUW participants, 2007"
- Exhibit 108 Flow Chart entitled "CHEERS participant Flow"
- Exhibit 109 Chart entitled "Example of 'dose-response' graph"
- Exhibit 110 Color photo chart entitled "Sources of Risk, by Group"
- Exhibit 111 Color Charts entitled "QMRA"
- Exhibit 112 Prefiled testimony of Susan O'Connell
- Exhibit 113 Prefiled testimony of Greeta Rijal with compact disc of attachments
- Exhibit 114 Charts entitled "Figure 18: Geometric means of Fecal Coliform Bacteria at North Area Stations Each Day After Heavy and Light Rainfalls for Three-Day Periods Compared with Dry Weather Densities"
- Exhibit 115 Two charts on one page entitled "Figure 1: Estimated FC densities down stream of the North Side and Calumet WRPs during dry weather (0) and wet weather ([X]with) or [without disinfection conditions"
- Exhibit 116 Prefiled testimony of Adrienne D. Nemura
- Exhibit 117 "Citations for Statutes and Regulations Referred to in Pre-Filed Testimony of Adrienne D. Nemura"
- Exhibit 118 A link to a website on the UAA for Chesapeake
- Exhibit 119 Four page document beginning with "Please refer to Report No. 05-15 for Figure and Table Numbers"
- Exhibit 120 Indiana Department of Environmental Management Letter from Bruno L. Pigot to Tinka Hyde USEPA Region V dated March 17, 2008

- Exhibit 121 USEPA Letter from Bharat Mathur to Bruno L. Pigot Indiana Department of Environmental Management dated June 9, 2008
- Exhibit 122 Regulatory language headed at top of page "314 CMR §:00 Division of Water Pollution Control"
- Exhibit 123 Ohio River Valley Water Sanitation Commission "Wet Weather Standards Proposal"
- Exhibit 124 Document entitled "Background Summary of Proposed Revisions"
- Exhibit 125 State of California, State Water Resources Control Board ORDER WQO 2005-0004 *In the matter of own motion review of failure to modify recreation use standards for Ballona Creek*
- Exhibit 126 Compact Disc titled "Blatchley Report"
- Exhibit 127 USEPA Memorandum dated Jan. 24, 1992 on "Request for Views on Allowable Duration of Water Quality Standards Variances"
- Exhibit 128 Water Quality Standards Academy Key Concepts "A Variance: Temporary Modification to Water Quality Standards"
- Exhibit 129 Rules of Department of Natural Resources Division 20 - Clean Water Commission Chapter 7 - Water Quality
- Exhibit 130 Department of Natural Resources Code of State Regulations beginning with "Table A"
- Exhibit 131 "Water Quality Standards: Wet Weather Issues and Recreational Use Protection" by Ephraim King of USEPA
- Exhibit 132 Indiana Department of Environmental Management "Agency nonrule policy document" Effective April 11, 2008
- Exhibit 133 Prefiled testimony and attachments of Stephen F. McGowan
- Exhibit 134 Document entitled "Exhibit 1"
- Exhibit 135 Document from website, first line "eGRID FAQ Clean Energy US EPA"
- Exhibit 136 20 ILCS 3855/1-75
- Exhibit 137 220 ILCS 5/16-127

- Exhibit 138 Document entitled "Exhibit 2"
- Exhibit 139 Compact Disc entitled "MWRD Precipitation Data"
- Exhibit 140 Byappanahalli and Whitman USGS, Great Lakes Science Center, Lake Michigan Ecological Research Station "*Escherichia coli* Sources and Microbiological Quality of Water Above and Below the Northside Wastewater Reclamation Plant (NSWRP), Metropolitan Water Reclamation District of Greater Chicago (MWRDGC)" Project Period July 15, 2008-July 14, 2009
- Exhibit 141 Two tables, first entitled "Mean *Escherichia Coli* Concentrations (MPN/100ML) in the Water from the North Shore Channel Segment Above and Below the North Side WRP"
- Exhibit 142 Three tables, first entitled "Coliform Bacteria Levels (MPN/100mL) in the Storm Sewer Samples Collected During Rain Storm Event on 09/04/08"
- Exhibit 143 "Electricity Sources and Emissions" Integrys energy service
- Exhibit 144 Prefiled testimony of Charles Haas
- Exhibit 145 OEM online "Distribution and determinants of trihalomethane concentrations in indoor swimming pools H. Chu and M J Niuwenhuijsen
- Exhibit 146 Prefiled testimony of David R. Zenz
- Exhibit 147 Letter to Toby Frevert of Illinois Environmental Protection Agency dated June 22, 2006 from Richard Lanyon Metropolitan Water Reclamation District of Greater Chicago
- Exhibit 148 "Review of "Technical Memorandum 1WQ - Disinfection Evaluation Prepared on Behalf of the Metropolitan Water Reclamation District of Greater Chicago" Final Report October 2006 Prepared by Science Applications International Corporation""
- Exhibit 149 "UV Disinfection Cost Study Cost Study Report for Metropolitan Water Reclamation District of Greater Chicago Volume 1 of 2 North Side Water Reclamation Plant" January 31, 2008" Prepared by CTE AECOM
- Exhibit 150 UV Disinfection Cost Study Cost Study Report for Metropolitan Water Reclamation District of Greater Chicago Volume 1 of 2 Stickney Water Reclamation Plant" September 9, 2008" Prepared by CTE AECOM
- Exhibit 151 One page document entitled "Prefiled Questions of the People of the State of Illinois to David R. Zenz" question number 2

- Exhibit 152 Table entitled "UV Disinfection - Capital Cost Estimates"
- Exhibit 153 Prefiled Testimony of Thomas E. Kunetz
- Exhibit 154 Compact Disc entitled Metropolitan Water Reclamation District of Greater Chicago North Side Master Plan September 9, 2008"
- Exhibit 155 MWRDGC - Stickney WRP Infrastructure & Process Needs Feasibility Study "Executive Summary"
- Exhibit 156 Selected pages from 2007 Metropolitan Water Reclamation District of Greater Chicago 2007 Budget
- Exhibit 157 Selected pages from 2008 Metropolitan Water Reclamation District of Greater Chicago Budget
- Exhibit 158 "Selected Plan Technical Memorandum 12 Master Plan Metropolitan Water Reclamation District of Greater Chicago North Side Water Reclamation Plant and Surrounding Chicago Area Waterways" June 2007 submitted by CTE AECOM
- Exhibit 159 Prefiled testimony of John Mastracchio
- Exhibit 160 Metropolitan Water Reclamation District of Greater Chicago 2007 Budget book in its entirety
- Exhibit 161 Metropolitan Water Reclamation District of Greater Chicago 2008 Budget Book in its entirety
- Exhibit 162 "Water and Wastewater Pricing An information overview" U.S. Environmental Protection Agency Office of Wastewater Management EPA 832-F-03-027
- Exhibit 163 Response to Question #1 from Environmental Law and Policy Center and the Sierra Club
- Exhibit 164 "POTW Nutrient Removal in Illinois" Illinois Association of Wastewater Agencies 2003 Study Summary
- Exhibit 165 "Analysis of Nutrient Removal Costs in the Chesapeake Bay Program and Implications for the Mississippi-Atchafalaya River Basin" Submitted to Water Environment Federation for 2008 WEFTEC Conference Chicago, IL
- Exhibit 166 "Public Commentary" Submitted to the Science Advisory Board Hypoxia Advisory Panel Draft Advisory Report Submitted by O'Brien & Gere
- Exhibit 167 Compact Disc entitled "Mississippi River, Whole Body contact Recreation Use Attainability Analysis, July 2005"

- Exhibit 168 "Use Attainability Analysis Mobile River Final" Alabama Department of Environmental Management January 2001
- Exhibit 169 Prefiled testimony of Charles S. Melching
- Exhibit 170 Compact Disc entitled "Other Melching Exhibits"
- Exhibit 171 One page document entitled "Information for Melching Response to IEPA Question 13"
- Exhibit 172 One page document entitled "WEB LINKS IN RESPONSE TO IEPA QUESTIONS FOR MELCHING"
- Exhibit 173 One page document entitled "Information for Melching Response to IEPA Question 40.A."
- Exhibit 174 One page document entitled "Information for Melching Response to IEPA Question 14.G."
- Exhibit 175 "The Qualitative Habitat Evaluation Index [QHEI]: Rationale, Methods, and Application" by Edward T. Rankin dated November 6, 1989
- Exhibit 176 One page document entitled "Information for Melching Response to IEPA Question 18.A."
- Exhibit 177 One page document entitled "Information for Melching Response to IEPA Question 18.D."
- Exhibit 178 One page document entitled "Information for Melching Response to IEPA Question 43.B."