

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
AMENDMENTS TO THE GENERAL USE) R18-32
WATER QUALITY STANDARDS) (Rulemaking – Water)
FOR CHLORIDE)

NOTICE OF FILING

To: Don Brown, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

PLEASE TAKE NOTICE that I have today electronically filed with the Illinois Pollution Control Board, testimony of Cindy Skrukrud concerning the Petition in R18-32, a copy of which is herewith served upon you.

Dated: January 2, 2019

Openlands

By:



Stacy Meyers

Stacy Meyers
Senior Counsel
Openlands
25 East Washington St., Suite 1650
Chicago, Illinois 60602
smeyers@openlands.org
312.863.6265

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
AMENDMENTS TO THE GENERAL USE) R18-32
WATER QUALITY STANDARDS) (Rulemaking – Water)
FOR CHLORIDE)

Testimony of Cynthia Skrukrud, PhD, Sierra Club, Illinois Chapter

The testimony is offered on behalf of the Illinois Chapter of the Sierra Club. The Sierra Club seeks to protect and restore rivers, lakes, streams and wetlands throughout the state and improve water quality. Sierra Club represents over 30,000 members in Illinois.

Sierra Club members are affected by chloride pollution from highway deicing activities in the Northeast Illinois which is the focus of the discussion in this Petition to change Illinois chloride water standards statewide. Sierra Club members are also affected statewide by chloride and other pollution in the form of dissolved solids that is caused by coal mining and certain other industrial processes in regions throughout the state. The Club is very concerned with the rising levels of chloride in Illinois surface and ground waters and within waters in the Midwest region as a whole.

I am the Clean Water Program Director of the Illinois Chapter of the Sierra Club. A copy of my CV is attached as Exhibit A.

I look forward to reading answers to pre-filed questions and learning more about the proposal in the hearings that have been scheduled. The Sierra Club agrees that the current Illinois 500 mg/L chloride standard needs to be reconsidered. However, on the basis of the information now available, it is apparent that the Petition raises a number of serious concerns that must be addressed.

1. The Petition proposes to change the chloride standard statewide from all chloride sources but it considers only the effects of highway deicing activities in NE Illinois. In fact, there are sources of chloride pollution in addition to highway deicing activities and the logic of the Petition make little sense as applied, for example, to a coal mining operation in Southern Illinois.

2. The Petition applies the more lenient standard it finds suitable for the entire period of December 1 through April 30 for the entire state. However, in other cases (DO and ammonia) where the Board has adopted standards that apply to winter months, "winter" has not included the months of March and April. Moreover, temperatures in Southern Illinois are certainly warmer in February through April than they are in the portion of the state that was the focus of the authors of the Petition.

3. It is frequently claimed in the Petition and supporting testimony that there should be little concern for 30-day chronic effects because high levels of chloride following highway deicing are

unlikely to ever last that long. It is not considered what 30-day and longer levels of chloride might result from mining operations or other polluting activities.

4. The number of species tested at 10 °C is low. Of those species the LC50 acute toxic values at 10 °C for mayflies, *Hyalella* and *C. dubia* are respectively 1960, 2185 and 2197 mg/L. The proposed winter criterion of 1,010 mg/L is above the value that would be used if setting criterion for mayflies alone and is just barely below what would be proposed to protect *Hyalella* and *C. Dubia* using IEPA methods for an important species at 35 Ill. Adm. Code 302.615(h): acute criteria = LC 50 /2

5. The criterion proposed in the Petition for May through November, while following the most recent EPA published acute criteria (860 mg/L), do not appear to be protective using the LC50 values found for 25/23 °C by Dr. Soucek for mayflies, *H. Azteca* and fingernail clams of 326 mg/L, 226 mg/L and 1672 mg/L and by New England Bioassay for *C. dubia* of 1165 mg/L.

6. The Petition does not consider any possible effects of chloride adding to high total TDS/conductivity although U.S. EPA has found an important effect of high total conductivity on aquatic life. See *Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity* at <https://www.epa.gov/wqc/draft-field-based-methods-developing-aquatic-life-criteria-specific-conductivity>.

7. The criteria proposed by the petition do not appear to be protective of mussels, including the federally and state endangered species—the Northern riffleshell, as is discussed in the testimony provided by Laura Barghusen.



Cynthia L. Skrukrud, PhD
Clean Water Program Director
Sierra Club, Illinois Chapter

Cynthia L Skrukud

Work Phone: 312-251-1680 x1015

E-mail: cindy.skrukud@sierraclub.org

QUALIFICATIONS

I have 30 years of experience as a staff person and volunteer working for environmental organizations. I partner with citizens, public officials, business leaders and farmers to advocate for improvements in wastewater treatment, sustainable design of development, and industrial and agricultural pollution prevention to better protect the water quality of rivers, streams, lakes, wetlands and our drinking water supplies.

WORK HISTORY

2015 to Present, Clean Water Program Director, Sierra Club, IL Chapter

2001-2014, Clean Water Advocate, Sierra Club, IL Chapter

My duties include advocacy for clean water at the federal, state and local levels, review and comment on permits required under the Clean Water Act, statewide water quality standards development and other rulemakings, and support for the Club's volunteer Water Sentinels who engage in advocacy, planning and water quality monitoring in watersheds throughout Illinois. I lead the Chapter's work for the Hackmatack National Wildlife Refuge. As Sierra Club's representative, I have chaired the Fox River Study Group, a multi-stakeholder workgroup addressing Fox River water quality issues for the past 16 years. I am one of two environmental representatives on the Illinois Nutrient Research and Education Council and serve on the Illinois Nutrient Loss Reduction Strategy Policy Working Group.

1999-2001, Independent Consultant

- Reviewed Clean Water Act permits for Sierra Club, Illinois Chapter
- Collaborated in preparation of *Kishwaukee River Sustainable Development Guide* and *North Branch Nippersink Creek- A Resource to Protect* for McHenry County Defenders
- Wrote the Your Watershed is...(Nippersink Creek, Boone Creek, Fox River, Kishwaukee River) series for Friends of the Fox River

1993-1999, Executive Director, McHenry County Defenders (now Environmental Defenders of McHenry County)

I was responsible for the management, fundraising, programs and outreach of an organization with 3-4 staff, a full service recycling center and numerous volunteers working on issues of waste reduction, natural resources and wildflower preservation, land use and water resources protection.

1987-1993, Postdoctoral Fellow & Visiting Assistant Professor, University of Illinois at Chicago

Within the Biology Department, I studied enzyme-enzyme interactions of photosynthesis, worked to retain freshmen minority students as biology majors and taught a 500-student introductory biology class.

EDUCATION

1987, Ph.D. Comparative Biochemistry, University of California, Berkeley

1978, B.S., Bio-Agricultural Sciences, Colorado State University

AWARDS RECEIVED

- 2017 Small Waters Education Everyday SuperHero Award
- 2015 Canton Area Citizens for Environmental Issues, Sierra Club Heart of Illinois Group Appreciation Award
- 2012 Partners in Conservation Award– Friends of Hackmatack National Wildlife Refuge Partnership, U.S. Department of the Interior
- 2009 River Hero Award, River Network
- 2006 Illinois Environmental Hero Award, Lt. Governor Pat Quinn
- 2005 Theta Award, McHenry County Defenders
- 2003 The Fox Environmental Hero Award, Friends of the Fox River
- 2002 Community Conservationist Award, McHenry County Soil & Water Conservation District
- 1999 The Living Green Award, Tryon Farm Institute
- 1999 Good Earth Award, McHenry Women In Action

BOARDS AND VOLUNTEER EXPERIENCE

Environmental Defenders of McHenry County

- Board of Directors 1990–1993
- President 1992–1993
- Water & Natural Resources Protection Committee Chair 1999–present

Friends of Hackmatack National Wildlife Refuge

- Steering Committee 2004–2014
- Secretary, Board of Directors 2014–present

Illinois Nutrient Loss Reduction Strategy Policy Working Group

- Member 2013–present

Illinois Nutrient Research and Education Council

- Environmental Representative 2012–present

Nippersink Watershed Association

- Board of Directors 2009–2016, Vice-President 2016–present

EarthShare Illinois

- Board of Directors 1992–2014
- Co-Chair 2014–2015
- Steering Committee 2016–2017

Fox River Ecosystem Partnership

- Vice-President 2002–2003
- Secretary 2003–2008

Friends of the Fox River

- Board of Directors 1996–2003
- President 1999–2002

SERVICE LIST: R18-32

<p>Erin L. Brooks Bryan Cave Leighton Paisner LLP Erin.brooks@bclplaw.com One Metropolitan Square 211 North Broadway, Suite 3600 St. Louis, MO 63102</p>	<p>Margaret Conway – Principal Assistant Attorney Metropolitan Water Reclamation Dist. Of Greater Chicago Margaret.conway@mwrdr.org 100 E. Erie Street Chicago, IL 60611</p>
<p>Alec M. Davis – Executive Director Illinois Environmental Regulatory Group adavis@ierg.org 215 East Adams Street Springfield, IL 62701</p>	<p>Stefanie N. Diers - Assistant Counsel Illinois Environmental Protection Agency Stefanie.diers@illinois.gov 1021 N. Grand Avenue East P.O. Box 19276 Springfield, IL 62794</p>
<p>N. LaDonna Driver ldriver@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711</p>	<p>Albert Ettinger Law Firm of Albert Ettinger Ettinger.Albert@gmail.com 53 W. Jackson, Suite 1664 Chicago, IL 60604</p>
<p>Jeffrey C. Fort Dentons US LLP Jeffrey.fort@dentons.com 233 South Wacker Drive, Suite 7800 Chicago, IL 60606-6404</p>	<p>Katherine D. Hodge HeplerBroom LLC khodge@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711</p>
<p>John Howell – VP, Regulatory Services Stateside Associates jh@stateside.com 2300 Clarendon Blvd., Suite 407 Arlington, VA 22201</p>	<p>James Huff Huff & Huff, Inc. James.huff@gza.com 915 Harger Road, Suite 330 Oak Brook, IL 60523</p>
<p>Aleshia Kenney U.S. Fish & Wildlife Service Aleshia_Kenney@fws.gov 1511 47th Avenue Moline, IL 61265</p>	<p>Katy Khayyat Dept. of Commerce & Economic Opportunity Katy.khayyat@illinois.gov Small Business Office 500 East Monroe Street Springfield, IL 62701</p>

Electronic Filing: Received, Clerk's Office 1/2/2019

<p>Claire A. Manning Brown, Hay & Stephens LLP cmanning@bhslaw.com 205 South Fifth Street, Suite 700 P.O. Box 2459 Springfield, IL 62705-2459</p>	<p>Melissa P. Martin – Senior Regulatory Counsel Stateside Associates mpf@stateside.com 2300 Clearndon Blvd., Suite 407 Arlington, VA 22201</p>
<p>Stacy Meyers - Senior Counsel Openlands smeyers@openlands.org 25 East Washington, Suite 1650 Chicago, IL 60602</p>	<p>Nancy J. Rich, Esq. Katten, Muchin & Rosenman LLP Nancy.rich@kattenlaw.com 525 West Monroe, Suite 1600 Chicago, IL 60601-3693</p>
<p>Renee Snow – General Counsel Illinois Department of Natural Resources Renee.snow@illinois.gov One Natural Resources Way Springfield, IL 62702-1271</p>	<p>Sara Terranova – Assistant Counsel Illinois Environmental Protection Agency Sara.terranova@illinois.gov 1021 N. Grand Avenue East P.O. Box 19276 Springfield, IL 62794</p>
<p>Robert Van Gyseghem City of Geneva bvangyseghem@geneva.il.us 1800 South Street Geneva, IL 60134-2203</p>	<p>Virginia Yang – Deputy Legal Counsel Illinois Department of Natural Resources Virginia.yang@illinois.gov One Natural Resources Way Springfield, IL 62702-1271</p>

CERTIFICATE OF SERVICE

I, the undersigned, certify that on January 2, 2019, I served electronically the attached PRE-FILED TESTIMONY OF CINDY SKRUKRUD, SIERRA CLUB, ILLINOIS CHAPTER to the participants listed on the attached SERVICE LIST.

A handwritten signature in cursive script that reads "Stacy Meyers".

Stacy Meyers