

2954

**EMBARGOED MATERIAL**

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IRRC

Cooper, Kathy

**From:** Elizabeth McCardell [mccardelle@gmail.com]  
**Sent:** Tuesday, June 18, 2013 3:19 PM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 18 PM 3: 32

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

Every school child in this state knows the difference between freshwater and saltwater. I do not understand how Pennsylvania can refuse to protect our freshwater rivers and streams from something as simple as salt. Companies dumping oil and gas wastewater containing millions of pounds of salt should have to treat their wastewater, just like everyone else. Please help us get proper protection for our rivers in place here in Pennsylvania.

Elizabeth McCardell  
520 Kauffman St.  
Philadelphia, PA 19147

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Cooper, Kathy

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IRRC

**From:** Laura Horowitz [12newmoons@gmail.com]  
**Sent:** Tuesday, June 18, 2013 8:38 PM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 19 AM 8:39

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

I do not understand how Pennsylvania can refuse to protect our freshwater rivers and streams from something as simple as salt. Or maybe I do-this is a result of greed and corruption. Companies dumping oil and gas wastewater containing millions of pounds of salt should have to treat their wastewater, just like everyone else. Please help us get proper protection for our rivers in place here in Pennsylvania.

Laura Horowitz  
6544 Darlington Road  
Pittsburgh, PA 15217

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Cooper, Kathy

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IRRC

**From:** Jimmy Moss [jamestmoss@yahoo.com]  
**Sent:** Tuesday, June 18, 2013 6:58 PM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954) JUN 19 AM 8:39

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Jimmy Moss  
1749 Hempstead Ln.  
Pittsburgh, PA 15241

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Cooper, Kathy

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**From:** MICHAEL O'BRIEN [w.michael.obrien@gmail.com]  
**Sent:** Wednesday, June 19, 2013 1:40 AM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 19 AM 8:39

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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MICHAEL O'BRIEN  
33 E MAIN ST APT 3  
CARNEGIE, PA 15106

2954

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Cooper, Kathy

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IRRC

**From:** Roberta Brunner [jal3na@yahoo.com]  
**Sent:** Tuesday, June 18, 2013 5:52 PM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 19 AM 8:39

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Roberta Brunner  
95 Helens Lane  
Renovo, PA 19046

2954

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Cooper, Kathy

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IRRC

**From:** Sherri Smith [sherrirsmith@rcn.com]  
**Sent:** Wednesday, June 19, 2013 2:22 AM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954) 2013 JUN 19 AM 8:39

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Sherri Smith  
1003 Concord Ave.  
1003 concord Ave.  
Drexel Hill, PA 19026

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Cooper, Kathy

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**From:** Richard Hockley [ruthahockley@yahoo.com]  
**Sent:** Wednesday, June 19, 2013 10:08 AM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 19 AM 11:18

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Richard Hockley  
206 Acre Dr.  
Carlisle, PA 17013

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Cooper, Kathy

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IRRC

**From:** Alexander Milone [alex.milone@hotmail.com]  
**Sent:** Wednesday, June 19, 2013 11:31 AM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954)

2013 JUN 19 AM 11: 48

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Alexander Milone  
6213 Hilltop Dr  
Brookhaven, PA 19015



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IRRC

**From:** Dan Hosko [danhosko@comcast.net]  
**Sent:** Wednesday, June 19, 2013 11:57 AM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC #2954) 2013 JUN 19 PM 1: 31

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Dan Hosko  
9 Terrace Drive  
Pittsburgh, PA 15205

36TH DISTRICT  
JIM FERLO

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(717) 767-6123  
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NATRONA HEIGHTS, PA 15065  
(724) 230-2000  
FAX: (724) 230-2003

E-MAIL: ferlo@pasenate.com  
WEBSITE: www.SenatorFerlo.com

2954

June 18<sup>th</sup>, 2013

Dear Members of the Independent Regulatory Review Commission:

As a member of the Pennsylvania General Assembly, I am writing to express our concern regarding the final-form Triennial Review of Water Quality Standards (IRRC #2954). I urge IRRC to reject the Triennial Review in its current form, due to a lack of aquatic life criteria for chlorides in Pennsylvania waters.

While the Pennsylvania Department of Environmental Protection (DEP) has now twice proposed a chloride standard to protect freshwater fish and other species (in both the 2010 and 2013 draft Triennial Reviews), the final-form regulations still fail to include this necessary and somewhat obvious water quality standard for a freshwater state like Pennsylvania.

While there are a number of sources of chlorides into our rivers, oil and gas wastewater contains some of the highest concentrations of chlorides (2 to 6 times saltier than seawater) and is being produced in increasing volumes in the state. The lack of an aquatic life protection standard for chlorides since the beginning of Marcellus Shale gas extraction began in a significant way in 2007 has been a gaping hole in protection from oil and gas wastewater, whether from direct discharge, indirect discharges, spills or non-point runoff.

While you will commonly hear that the discharge of oil and gas wastewater into our rivers is a thing of the past, this is not supported by DEP's actual documentation of major chloride discharges. As an example, below is a list of four facilities in the western part of the state that have reported major chloride discharges to DEP for a number of years, up to the present:

**January 2013 Chloride Discharges:**

Facility/NPDES Permit #	County	Concentration	Mass	Flow
Hart Resources Tech. – Creekside / PA0095443-A1	Indiana	74,450 mg/L	11,184 lbs/day	18,000 gallons/day
PA Brine – Josephine / PA0095273	Indiana	87,350 mg/L	112,990 lbs/day	155,000 gallons/day
PA Brine – Franklin / PA0101508	Venango	46,301 mg/L	115,920 lbs/day	300,000 gallons/day
Waste Treatment Corp. / PA0102784	Warren	71,760 mg/L	125,162 lbs/day	209,000 gallons/day
<i>(Data from DEP's eDMR system at <a href="http://www.ahs.dep.state.pa.us/NRS/">http://www.ahs.dep.state.pa.us/NRS/</a>)</i>			<b>Total:</b>	<b>365, 256 lbs/day</b> <b>682,000</b> <b>gallons/day</b>



Senate of Pennsylvania

**COMMITTEES**

LAW & JUSTICE, MINORITY CHAIR  
APPROPRIATIONS, MINORITY VICE CHAIR  
CONSUMER PROTECTION  
& PROFESSIONAL LICENSURE  
ENVIRONMENTAL RESOURCES & ENERGY

URBAN REDEVELOPMENT AUTHORITY  
OF PITTSBURGH, BOARD TREASURER  
ALLEGHENY RIVER TOWNS ENTERPRISE  
ZONE (ARTEZ), MEMBER  
PORT OF PITTSBURGH COMMISSION,  
BOARD MEMBER  
PITTSBURGH GREEN INNOVATORS,  
VICE-PRESIDENT  
PRESERVATION PENNSYLVANIA,  
BOARD MEMBER  
PA HISTORICAL & MUSEUM COMMISSION,  
BOARD MEMBER  
LGBT EQUALITY CAUCUS, MEMBER  
ARTS AND CULTURE CAUCUS, MEMBER  
THIRD CLASS CITIES CAUCUS, MEMBER

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JUN 19 PM 3:30

**In just one month, these four facilities discharged over 10 million pounds of chlorides into surface water. The concentration of salts in these discharges is over twice as salty as seawater. This is not a complete list of facilities discharging chlorides, but it provides IRRC with the strong need to establish a protective water quality standard.**

Neither DEP's effort to get the oil and gas industry to voluntarily stop these discharges nor DEP's permitting program for these dischargers has resulted in a halt to these large scale discharges of chlorides. While there are still questions as to the origin of these oil and gas wastewaters, this is not relevant to the establishment of a protective water quality standard for chlorides.

Finally, DEP itself has not provided any scientific justification or data to rationalize the removal of their proposed chloride water quality standard from the final-form regulation. DEP based its draft chloride standard on a standard that Iowa developed in coordination with EPA. DEP explains their reason for now withdrawing their proposal as follows:

“The Department is recommending the Board withdraw the chloride criteria, not because the Iowa criterion is flawed but rather it is not completely applicable statewide to the ionic composition found in the waters of the Commonwealth.” (Triennial Review DEP Comment Response document, p. 19)

In other words, DEP thinks that it is possible that there are streams in Pennsylvania for which the Iowa standard may not be appropriate. However, DEP has presented no scientific studies or even any data to support this idea. DEP does not define in any quantifiable or specific way what stream composition would result in the standard being “not completely applicable”. **Given the absence of any data to support DEP's assertion, the IRRC should reject the Triennial Review and recommend that DEP include their draft chloride standard in the final Triennial Review.**

Delaying the establishment of a chloride standard for Pennsylvania rivers for at least another three years is not acceptable – and the IRRC should act accordingly. Protection of freshwater fish and other aquatic species helps both protect our environment and the tourism and recreational fishing industries, which are vitally important to the Pennsylvania economy. I urge IRRC to protect these public resources which provide many public benefits.

Sincerely,



Jim Ferlo  
Senator, 38<sup>th</sup> District

Cooper, Kathy

2954

**EMBARGOED MATERIAL** RECEIVED

IRRC

**From:** Trish Prusch [tntjji@verizon.net]  
**Sent:** Wednesday, June 19, 2013 4:45 PM  
**To:** IRRC  
**Subject:** Triennial Review of Water Quality Standards (IRRC 2013-2015) 2013 JUN 20 AM 9:07

Dear Members,

As a Pennsylvania resident I am greatly concerned with the quality of our rivers and streams, and as a taxpayer I hope that our state regulators are working to make sure our water is protected. I urge the Independent Regulatory Review Commission (IRRC) to reject the final-form Triennial Review of Water Quality Standards, due to the lack of any standard for levels of salt (chlorides) in our rivers. We need to make sure a chloride standard is included in our state water quality standards.

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Trish Prusch  
2230 Mill Pond Rd.  
Quakertown, PA 18951

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IRRC



2954

2013 JUN 20 AM 9: 23

June 20, 2013

Mr. David Sumner  
Executive Director  
Independent Regulatory Review Commission  
333 Market Street  
Harrisburg, PA 17101

Dear Mr. Sumner:

On behalf of its membership comprising thousands of businesses of all sizes and across all industry sectors, the Pennsylvania Chamber of Business and Industry (PA Chamber) writes to express its support for the final rulemaking regarding the current triennial review of Pennsylvania's water quality standards. Specifically, we would like to express our support for the Department of Environmental Protection's (DEP) position to not include an aquatic life standard for chlorides.

The mechanism of aquatic toxicity from chlorides is osmotic pressure changes in the water body. Osmotic pressure impacts the flow of water between the cells of an aquatic organism and its water environment. If the osmotic pressure of the water body becomes too high (from increased salinity), the aquatic organism can become damaged due to loss of water from its cells to the aquatic environment. Conversely, if the osmotic pressure becomes too low, water will rush into the organism's cells to the point of swelling or bursting. Pennsylvania has an enforceable water quality standard for osmotic pressure of 50 mOsm/kg (25 PA Code Chapter 93.7).

This water quality standard has been in place for many years, and provides in-stream protection of freshwater aquatic organisms. The DEP needs to monitor and enforce against this existing water quality standard rather than create a new yet redundant water quality standard. The DEP stated in the preamble of the previous triennial water quality standard review (40 PA Bulletin 2264, 5/1/2010) that the reason for adopting an in-stream chlorides water quality standard was for "administrative convenience" (versus the osmotic pressure standard). In addition, the DEP's Comment and Response Document for Wastewater Treatment Requirements (25 PA Code Chapter 95) very clearly stated that "the Department has reviewed the relevant data and determined that the current osmotic pressure criterion in water quality standards regulations provides protection for aquatic life at the point of discharge." Therefore, the absence of a chlorides standard from the current triennial water quality standards does NOT result in a lack of in-stream aquatic life protection in the Commonwealth of Pennsylvania. It simply means that the DEP needs to utilize its resources and authority to monitor and enforce against the current osmotic pressure standard.

The scientific debate of what is the correct and applicable chloride water quality criterion is extensive and ongoing. The U.S. EPA has recognized and stated that the current national criterion for chlorides (EPA 440/5-88-001, 1988) is scientifically outdated, and that it is currently working to develop a new national criterion. Individual states are adopting various and differing criteria based on their own studies. For

example, Kentucky's acute and chronic standards for chloride are 1,200 mg/l and 600 mg/l (401 KAR 10:031, Section 6, Table 1), Wisconsin's acute and chronic standards are 757 mg/l and 395 mg/l (NR 105.06, Tables 1 and 5), and Illinois has adopted a chlorides standard stating 500 mg/l shall not be exceeded except in waters where mixing is allowed (35 IL Code 302.208(g), thereby implying limited applicability of this standard. In 2009, Iowa adopted a chlorides standards based on a hardness/sulfates mathematical relationship (ARC 8214B, IAB 10/7/2009). Maryland, Ohio, and Tennessee do not have chloride limits. To highlight the scientific diversity of chlorides in the water environment, at a presentation to the Water Resources Advisory Committee (WRAC) on August 27, 2012, David Soucek of the Illinois Natural History Survey (INHS) stated that the formula-based Iowa water quality standard for chlorides would not be applicable to the waters of Pennsylvania due to ionic and geological differences between Midwest and Pennsylvania waters.

Moreover, when the WRAC voted to support the final triennial water quality standards rulemaking, it advised the DEP to actively seek and study the applicable and appropriate science for developing a chloride water quality standard that is directly applicable to Commonwealth waters. The PA Chamber supports this path forward.

Finally, stakeholders involved in this rulemaking, including the DEP, you and your staff, the state legislature, and groups for and against the rulemaking, have had more than enough time to have their concerns addressed throughout this exhaustive rulemaking process, which has produced a completely vetted rulemaking that is based on sound, verifiable science, takes into consideration the economic impact on the regulated community, and strikes the necessary balance between surface water protection and economic development throughout Pennsylvania.

With the aforementioned in mind, we strongly and respectfully request that the Independent Regulatory Review Commission approve this final rulemaking.

Sincerely,



Sam Denisco  
Vice President, Government Affairs

Cc: Mr. Silvan B. Lutkewitte, III  
Mr. George Bedwick  
Mr. John F. Mizner  
Mr. Lawrence J. Tabas  
Mr. Dennis A. Watson