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WISCONSIN STATE REPRESENTATIVE ★ 89TH ASSEMBLY DISTRICT

Co-Chair, Joint Committee on Finance

**Rep. John Nygren Testimony In Favor of Assembly Bill 85
Assembly Committee on the Environment
April 4, 2019**

Good morning Chairman Kitchens and members of the Assembly Committee on the Environment,

Thank you for opportunity to testify in favor of Assembly Bill 85 (AB85) today. Under the bill, the Department of Health Services would be required to develop groundwater quality standards for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). These are manmade substances that fall under the larger umbrella of polyfluoroalkyl substances (PFAS). PFOA and PFOS are some of the most prevalent chemicals in this family of substances and are the two that have been studied the most.

According to the EPA, PFAS have been manufactured and used in products in the United States since the 1940s. They are found in a wide variety of items that we use every day, such as food packaging, water-repellent fabrics like GoreTex, non-stick products like Teflon, polishes, paints, electronics, and fire-fighting foams. Though products containing PFAS have made our lives easier in many ways, science over the last several years indicates these chemicals are potentially dangerous to humans.

As I mentioned, PFAS are used in the production of lifesaving firefighting foams. When mixed with water, these foams lower surface tension and allow the mixture to spread more easily, making them extremely effective in fighting flammable liquid fires. First responders and branches of the military use these foams, and PFAS contamination has been discovered near the state's major airports. A major business in my district manufactures this foam and previously tested it on an outdoor training ground. Water containing PFAS flowed off their property over many years of foam testing and contaminated ditches and groundwater in Marinette and the Town of Peshtigo.

Though developed and tested with the best of intentions, a product containing PFAS is now causing hardship to residents of my district and we will likely begin seeing similar situations throughout the state in the coming years. My goal in drafting this legislation is to bring awareness to PFAS contamination as an emerging issue in Wisconsin, and provide us with a state standard so we can begin adequately addressing contamination moving forward. This standard will help inform people what concentrations of PFAS remain safe for consumption. It will also provide greater clarity and direction for the DNR with both enforcement and clean-up efforts.

Thank you for the opportunity to speak in favor of AB 85 and I will now answer any questions.

(over)

FAQ's:

Q: Does this bill change the process under which DHS and DNR develop and enact enforcement standards under Ch. 160?

A: That was not the intent of the bill, and we are working on an amendment that provides better clarity for DHS.

Q: DHS is already in the process of developing an enforcement standard. Why is this bill necessary?

A: This is a very important issue in my district and I want to see this process of addressing PFAS stay on the right track. The federal and state governments have wavered in the past when it comes to PFAS so this bill can also be seen as a layer of redundancy.

Q: Why is there a 90-day time requirement included in the bill?

A: To our knowledge, the testing of these chemicals was supposed to be completed last year and had been stalled at one point. The time requirement was added to ensure the testing is actually completed in a timely manner.

Testimony on 2019 Assembly Bill 85

Senator Robert Cowles

Assembly Committee on Environment – April 4, 2019

Thank you, Chairman Kitchens and committee members, for allowing me to submit testimony on 2019 Assembly Bill 85. This bill would require the establishment of health-based water quality standards for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) within 90 days of publication.

A class of more than 3,000 per- and poly-fluorinated compounds, collectively known as PFAS chemicals, are known and used in a number of consumer goods including non-stick cookware and food packaging as well as other products like firefighting foam. These compounds are known as ‘forever chemicals’ as they take decades to breakdown. Because of a lack of standards regulating these chemicals, the responsibility of cleanup efforts is complicated in many of the sites with PFAS chemicals detected. When the use of these chemicals is uncontained, it can lead to water contamination, and the overconsumption of water with PFAS compounds by humans has been linked to thyroid disease, high cholesterol, ulcerative colitis, decreased fertility, birthing issues including pre-eclampsia and low birth weight, and several other health issues.

In Wisconsin, over 20 of these PFAS chemicals are known to be used, and the two most common, PFOA and PFOS, have been detected in groundwater in Marinette near a testing site for fire suppressant foam, in Baraboo near an ammunition plant, and in Madison and Milwaukee near National Guard airfields where firefighting foam was used in training. In total, the DNR has detected 16 sites in the Bureau for Remediation and Redevelopment Tracking System (BRRTS) with PFAS compounds.

On the federal level, the Environmental Protection Agency has announced that they are moving ahead with setting health-based standards of certain PFAS compounds, possibly based on unenforceable advisory levels of 70 parts-per-trillion (ppt) for PFOA and PFOS. Other states have set PFAS standards, ranging from Vermont at 20 ppt to Michigan at 70 ppt.

In early March of 2018, the DNR sent a request to DHS for the state toxicologist to start providing recommendations for health-based standards of PFOA and PFOS chemicals among a list of about two dozen other chemicals. DHS has missed the nine-month deadline under the memorandum of understanding (MOU) negotiated in the past between the Departments and translated into statutes. After a January 2019 petition, the DNR agreed to expand the request to 24 other PFAS compounds known to be used in Wisconsin.

For citizens from Marinette, Baraboo, and other areas around the state struggling with the search for clean water, they’ve waited long enough for these standards to be developed. DHS has exceeded the amount of time they’ve been provided in statutes based on the MOU for developing these standards, and with studies from the federal government and elsewhere and examples from other states, there’s no reason this couldn’t be done in 90 days with a nudge from the Legislature.

We should not continue delaying the implementation of water quality standards for these chemicals as further delay will only stall cleanup efforts and could contribute to more PFOA and PFOS chemicals entering our surface waters and groundwater.



State of Wisconsin
Department of Health Services

Tony Evers, Governor
Andrea Palm, Secretary

Assembly Committee on Environment

2019 Assembly Bill 85: related to state health-based groundwater quality standards

April 4, 2019

Good afternoon, Chairman Kitchens and members of the Committee. My name is Dr. Mark Werner and I am the Director of the Bureau of Environmental and Occupational Health at the Department of Health Services. I am joined by Dr. Sarah Yang – our groundwater toxicologist. In a moment, Dr. Yang will offer a description of the process we use to develop recommendations for groundwater enforcement standards and an update on our progress in developing specific recommendations for PFOA and PFOS and a range of other substances.

First, I would like to thank this committee for the opportunity to speak to you today. In our work on drinking water and groundwater, our agency shares the goal of this committee to ensure that we have protective health standards and guidance that ensures the health of the residents of Wisconsin.

To this end, I would like to describe some of the other work that the Department undertakes to help ensure that the residents of Wisconsin have access to safe drinking water. We routinely investigate waterborne disease outbreaks to identify sources of disease and make sure they are corrected. We develop and disseminate a range of educational materials about how Wisconsinites can identify and address water contamination issues. For example, we have worked closely with our local and state agency partners in Marinette and Madison to address concerns related to the presence of perfluorinated compounds in water, and we have worked with the City of Milwaukee water utility to develop and disseminate health messages around lead in drinking water.

We also work with a broad array of partners – including DNR, local public health departments and the Wisconsin State Laboratory of Hygiene – to provide resources and clear, consistent guidance in response to flooding-related contamination of private wells and other incidents. And we routinely provide direct advice and referral to Wisconsin residents who need assistance in obtaining or maintaining a source of clean drinking water.

At this time, Dr. Sarah Yang will provide a description of the process we follow for setting groundwater standards and an update on our work on enforcement standard recommendations for PFOA, PFOS and other substances.

Hello and thank for you this opportunity. I am going to share with you the journey that DHS takes to develop groundwater standards. I think of the process that we follow to develop our recommended standards as a journey because of the time and research that we put into making sure each recommended standard is scientifically sound and adequately protective. This process for developing recommended standards starts when DNR sends us a request for recommended standards and includes reviewing the available scientific information, selecting an appropriate standard, and developing a support document.

In the first step of this process, we collect the available scientific information about the substance. To do this, we start by looking to see if the United States Environmental Protection Agency (EPA) has reviewed the toxicity of this substance. For instance, we look to see if EPA's Office of Water has established a maximum contaminant level (MCL) or a health advisory level, or if their Integrated Risk

Assessment Program (known as IRIS) has set toxicity values. We also check to see if the substance has been evaluated by EPA's Office of Pesticide Programs.

After looking for information from EPA, we evaluate whether other agencies have established health-based values. For instance, we look to see if the Centers for Disease Control and Prevention (CDC) have recently published a toxicological profile on this substance. We also look to see if the World Health Organization, Health Canada, or other states have established health-based values for this substance.

We then review the findings from recent research studies. We use online databases to see if scientists have published studies in animals or people evaluating the effects of this substance. For instance, we look to see if the substance has been shown to cause cancer, affect development, or damage organs like the liver or kidneys. From these studies, we are hoping to identify an amount above which health effects occur. For some substances, the available scientific information is limited with only a handful of studies available. For others, there are numerous studies.

Regardless of how many studies are available, we review all of the relevant health information to ensure that our recommended standard is scientifically sound and adequately protective. We are looking to see if these studies are peer-reviewed and published in research journals. If these studies were done in research animals, we look to see if the animals were exposed to multiple amounts of the substance for a sufficient amount of time, if the effects are relevant to people, and if a health-based level can be identified.

Only after gathering a firm grasp of the available scientific information do we move on to the second step of the process: selecting the appropriate standard using the road map laid out in Chapter 160 of

State Statute. Statute gives preference to using drinking water concentrations and other health-based values from the EPA. We may recommend a different value if one is not available from the EPA or if there is significant technical information to suggest that a different number is more appropriate. This is where the research studies come into play. For example, we sometimes ask ourselves, if this study had been published when the EPA established their value, would they have done something differently?

Another situation where research studies are important is when there are no federal numbers or state drinking water standards for a substance. When this happens, Chapter 160 specifies how we use results from these studies to calculate a recommended groundwater standard. Even then, we occasionally find that there just is not enough quality health information to develop a recommendation for specific substances.

In the final phase of the process, we develop a support document for each of the substances in the request. In this document, we describe what the substance is, the overall health effects that it can cause, how people can come in contact with it, and detail the results of our scientific search. We lay out the available information and describe why we recommended what we did. We then submit these recommendations to DNR so they can continue the groundwater standard process by starting the rule-making process.

I am pleased to report that we are near the end of this journey for all 27 substances included in DNR's March 2018 request. In addition to PFOA and PFOS, this request includes many other priority substances with known health effects, such as pesticides, metals, and volatile organic compounds. At this time, we have assessed more than 5,000 scientific publications to make sure that the standards that we recommend are scientifically sound and protective of the people of Wisconsin. Our goal is to

complete the recommended standards for all 27 substances by mid-2019, and we anticipate submitting these recommendations to the Department of Natural Resources within the next 90 days.

On behalf of the Department of Health Services, I would like to thank you for your time and attention.

We are happy to answer any questions that you may have.

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Assembly Committee on Environment

2019 Assembly Bill 85

DHS to Set State Health-Based Groundwater Standards for PFOA and PFOS

Thursday, April 4, 2019

Good afternoon Chairman Kitchens and members of the Committee. My name is Jim Zellmer, and I am the Deputy Administrator in the Wisconsin Department of Natural Resources' Environmental Management Division. I oversee the water programs that deal with drinking water and groundwater, water quality, both water resources and wastewater, and our office of great waters that works with stakeholders on the Great Lakes and Mississippi River. Thank you for the opportunity to testify on the Assembly Bill 85, which would require the Department of Health Services to establish state health-based groundwater quality standards for perfluorooctanoic acid and perfluorooctane sulfonate, commonly referred to as PFOA and PFOS, respectively, within 90 days of enactment.

The groundwater protection statute, Chapter 160, provides procedures and responsibilities for DNR and DHS to establish groundwater enforcement standards. DNR is required to develop and maintain a list of emerging substances that exist in or have a reasonable probability of entering the groundwater. DNR periodically sends its list to DHS for a determination on the need to establish groundwater standards for each substance.

DHS reviews all available, relevant and scientifically valid information and provides its recommendation to DNR. DNR then begins rulemaking to revise the administrative rule on groundwater quality standards, Chapter NR 140, to reflect recommendations made by DHS.

On March 2, 2018, DNR submitted a request to DHS for recommendations on setting health-based groundwater quality standards for twenty-seven substances, including PFOA and PFOS. DHS is reviewing available information and anticipates providing its recommendation to DNR for all twenty-seven substances by mid-2019. Upon receipt of the DHS recommendation, DNR will begin rulemaking to incorporate the new standards into administrative rule. The statutes require DNR to complete the rulemaking process within 30 months following the publishing of the statement of scope for the proposed rule. This can prove to be difficult with the multiple step process involved in rulemaking.

As a point of clarification, groundwater quality standards are used to evaluate groundwater monitoring data and establish a range of responses DNR may require if a standard is exceeded. The DNR would need to pursue a separate rulemaking to establish a maximum contaminant level (MCL) in the safe drinking water administrative rule, Chapter NR 809, to require monitoring of public water supplies and establish the maximum permissible level of a contaminant in drinking water that is delivered to the public.

On behalf of the Environmental Management Division, I would like to thank you for your time today. I would be happy to answer any questions you may have.

WMC

WISCONSIN MANUFACTURERS & COMMERCE

Testimony on 2019 Assembly Bill 85

Assembly Committee on Environment

April 4, 2019

Thank you Chairman Kitchens and members of the Assembly Committee on Environment for the opportunity to provide these comments on Assembly Bill 85. This legislation requires the Department of Health Services to establish health-based groundwater quality standards for perfluorooctanoic acid and perfluorooctane sulfonate, or PFOA and PFOS.

Wisconsin Manufacturers & Commerce (WMC) is the state chamber of commerce and largest general business association in Wisconsin. WMC was founded over 100 years ago, and we are proud to represent approximately 3,800 member companies of all sizes, and from every sector of our economy. Our mission is to make Wisconsin the most competitive state in the nation in which to do business.

Given the significant amount of media attention surrounding PFAS compounds, WMC can appreciate why lawmakers are interested in legislation on this topic. We are willing to work with legislators and the administration to address this important matter in a manner that is based on sound science and methodology. Our members want clean and healthy water. They rely on it for their personal use, their employee's use, and for their livelihood. They also want a fair, stable, predictable and transparent regulatory structure in which to operate, which is why it is imperative that any actions taken by the state of Wisconsin be consistent with and not more stringent than regulations established by the federal government.

Setting standards more restrictive than federal standards would require businesses in this state to comply with a standards that would likely change in the near future when the EPA sets its interim groundwater standards. This would lead to confusion and uncertainty for our communities. It is important that the state gets this right and acts deliberately. Wisconsin runs the risk of over regulation, leading to drastic economic impacts with little to no actual health outcome improvement. It is important to keep in mind that even once enforcement standards are developed, testing and treating water that contains PFOA and PFOS is complex, expensive, and the science is still under development.

As will be discussed in greater detail, the federal Environmental Protection Agency (EPA) currently is working on a comprehensive PFAS action plan and is investing significant resources into studying the science. Therefore, WMC urges that any actions taken by the State be done in conjunction with the federal government and be based solely on the best available science and methodology.

I. Background of PFAS

PFOA and PFOS are two chemicals that are part of a family of chemical compounds known as perfluoroalkyl and polyfluoroalkyl substances, or PFAS. **PFOA and PFOS are no longer manufactured in the United States, and therefore, the exposure risk to the general population is minimal.** These chemicals were previously used in the manufacture of numerous products, such as non-stick cookware and other stain resistant materials. As will be discussed further, the levels of long-chain PFOA and PFOS in the environment and humans are declining dramatically.

II. EPA PFAS Action Plan

In May of 2016, EPA issued a health advisory for PFOS and PFOA of 70 parts per trillion. This health advisory is not regulatory, but serves as a guide for federal, state and local officials, and public water supply systems. EPA is now currently in the process of establishing regulatory standards and limits. On February 14, 2019, the EPA announced its comprehensive PFAS action plan. The plan lists several short- and long-term agency solutions to address PFAS in drinking water. Specifically, under the plan, EPA is moving forward with the maximum contaminant level process under the Safe Drinking Act¹ for PFOA and PFOS and will make a regulatory determination by the end of 2019. The EPA will also propose to include PFAS in drinking water monitoring under the next Unregulated Contaminant Monitoring Program.²

Last August, EPA submitted its draft interim recommendations to address groundwater contaminated with PFOS and PFOA to the Office of Management and Budget. EPA has publicly committed to issuing interim groundwater cleanup standards by the end of this year.

In addition to these monitoring and cleanup efforts, the EPA stated that it will continue to research PFAS, including developing new analytical methods for detecting PFAS and developing technologies for PFAS removal.

III. Current Regulation of PFAS in Wisconsin

Groundwater standards are set through Chapter 160. Chapter 160 requires DNR to submit a list of compounds to DHS. DHS then works to set groundwater standards. Once DHS has determined those standards, DHS submits those recommendations to the DNR. Then, DNR has 9 months to propose rules based on those recommendations.

DNR submitted PFOA and PFOS to DHS in 2018 and DHS began working to set those recommendations. DHS has previously estimated that they will submit their standards to DNR mid-2019, but it could be sooner. Once DNR receives these recommendations, it will begin the rulemaking process to set enforcement standards for PFOA and PFOS.

We understand and sympathize with the frustration that standards have not been recommended yet. Chapter 160 requires that within 9 months after the DNR submits substances for which they

¹ <https://www.epa.gov/laws-regulations/summary-safe-drinking-water-act>.

² <https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule>.

seek a recommended standard Chapter 160 provides the DNR authority to regulate enforcement groundwater standards. It has been 13 months since the substances were submitted to DHS. At the same time, we also understand the complexity of regulating these compounds, given limitations on testing methodologies, the complex fate and transport issues, and difficulty identifying sources.

Senate Bill 109 amends Chapter 254 to regulate PFOS and PFOAS in groundwater. Subchapter II of Chapter 254 governs standards set for exposure to lead paint, lead generally, and asbestos. Chapter 254 is not the appropriate place in our statutes to regulate groundwater. Chapter 254 does not have a nexus to chapter 160 which provides DNR the authority to enforce groundwater standards. Further, chapter 160 sets necessary requirements that DHS must follow in recommending standards, provides flexibility to respond to federal numbers, and further, already provides for a thoroughly defined process for recommending groundwater standards and subsequent rulemaking. If this language remains in Chapter 254 it is at best unclear how DHS will enforce these standards or what impact this may have on the ongoing process under chapter 160 for these two compounds.

We think these concerns can be readily resolved by adding the 90-day requirement for DHS to set the standard into Chapter 160 for PFOS and PFOA accomplishes the same goal, but ensures that the standard process for setting groundwater is followed in this case as well. In addition, and critical to striking the right balance in regulating new substances in groundwater, is that the normal rulemaking process for PFOS and PFOA would be set in the same manner as all other groundwater standards without any unintentional consequences of placing the changes in Chapter 254. Further, the normal course of rulemaking provides a full opportunity for public input on any enforcement and allows for further coordination between the Federal Government and the State.

IV. Wisconsin Should Work in Conjunction with the Federal Government and Not Promulgate Rules More Stringent than Federal Regulations

Given the EPA's comprehensive PFAS action plan and the likelihood that we see interim groundwater standards from the EPA before the end of the year, WMC urges the Wisconsin Legislature and state agencies to work in concert with the federal EPA rather than promulgate administrative rules that are more stringent than the federal government.

It is especially important that the State allows the research to develop, and take its time to review the scientific literature before adopting more stringent standards than the federal government. There are significant scientific studies relating to PFOA and PFOS, and the evidence does not establish that exposure to these chemicals at the levels typically found in the environment cause adverse human health effects. Most of these studies have tested amounts of PFOA and PFOS that are higher than levels found in the environment.

Moreover, the levels of PFOA and PFOS in the environment and humans are declining at a significant pace. This reduced exposure is demonstrated by a number of studies which measure those compounds in the blood of the U.S. population. More specifically, two different studies have collected and published data in this area – the National Health and Nutrition Examination

Survey by the U.S. Centers for Disease Control and Prevention,³ along with a survey of American Red Cross⁴ blood donors. Both of those studies have shown a dramatic decline of PFOA and PFAS in blood levels since 2000.

Further, testing methods for these compounds are not well developed or even available outside limited options for drinking water. There is currently no EPA validated groundwater testing method for PFOA and PFOS. That is not for lack of effort in developing and validating these methods, but rather due to limited laboratories able to conduct this testing, cost associated with testing and furthermore, instrumentation and collecting materials often include PFAS compounds themselves that make testing and sampling difficult when possible.

V. Conclusion

WMC understands the concern raised by the public about this important issue and wants to work with the legislature and state agencies. It is vitally important that the State properly collect and analyze the science and data before it begins any administrative rulemaking process on this issue. WMC also strongly urges that the State work closely with the federal government, especially in light of the EPA PFAS action plan, and to not adopt any standards more stringent than or in advance of the federal regulation.

Thank you again for the opportunity to provide these comments.

³ <https://www.atsdr.cdc.gov/pfas/pfas-blood-testing.html>.

⁴ <https://www.sciencedirect.com/science/article/pii/S0013935117306916>.



I. Introduction

The Wisconsin Paper Council appreciates the opportunity to testify on Assembly Bill 85, which directs the Department of Health Services (DHS) to establish a groundwater quality standard for perfluorooctanoic acid and perfluorooctane sulfonate (PFOS and PFOA). As you may know the papermaking industry is a key economic driver for Wisconsin - employing over 35,000 highly skilled men and women whose efforts continue to make us the number one papermaking state in the United States. The Wisconsin Paper Council is the premier trade association which advocates for our entire industry – an industry which is focused on sustainability and strong environmental stewardship. Our industry prides itself on its continual scientific advancement to produce products that are renewable, recyclable, and sustainable.

The Wisconsin Paper Council generally supports exploring science-based ground water quality standards for PFOS and PFOA. However, the following suggestions would ensure reasonable and predictable regulation in an area of science that is still very much in the development phase.

II. The legislation should be in Chapter 160 (“Groundwater Protection Standards”) rather than Chapter 254 (“Environmental Health”).

As drafted, this legislation adds a section entitled “Groundwater contaminants” to Chapter 254, Subchapter II. It may seem like a Chapter titled “Environmental Health” is the perfect place to add a groundwater standard. After all, no one would argue that groundwater regulation is not environmental regulation.

However, the term “environmental” in this chapter means something very different than it does to DNR. There are two widely accepted definitions of “environment”: 1) the surroundings or conditions in which a person...lives or operates, and 2) the natural world, as a whole or in a particular geographical area, especially as affected by human activity. (See Oxforddictionaries.com). DNR is responsible for environmental regulations of the natural world, while Chapter 254 speaks to a person’s more immediate surroundings. The two categories of “environmental regulation” are very different.

In Chapter 254, Subchapter II, DHS is charged with regulating toxic substances. The section speaks mainly to indoor health threats. It addresses lead paint, asbestos in building materials, and indoor air quality. With the exception of lead, none of the over 250 regulated drinking water contaminants are listed as Toxic Substances in Chapter 254, nor are the countless other air and water emissions DNR regulates.

As is the case with lead, when a toxic substance is found in both products and in water, the water portion is regulated by DNR. Contamination levels in paint and other lead-containing products are determined and enforced through Chapter 254, but the water quality criteria for lead is not. That is regulated separately by DNR, with wholly different standards for water limits than exist for product limits. In fact, the toxic substances, including many heavy metals, found in water are all listed separately in NR 105 rather than being incorporated in Chapter 254.

More troubling is the uncertainty surrounding DHS’s enforcement authority with respect to toxic substances listed in Chapter 254. Though it appears this legislation would not immediately give DHS

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enforcement authority over the PFOS and PFOA limits, adding those two compounds to Chapter 254 would open the door to DHS enforcing those standards, similar to the lead product standards, and could eventually subject the regulated community to duplicative regulation, duplicative enforcement actions, and even criminal penalties.

In addition, DNR is not required, and in fact does not seem to have the authority, to promulgate a rule based on a standard established in Chapter 254. DNR's rulemaking authority for groundwater standards is found in §160.07(5) and relates only to those standards developed through the process in §160.07. (§160.07(5) authorizes DNR to promulgate rules *only* for substances transmitted to DHS under §160.07(2)).

Finally, it is unclear the methodology DHS will use when setting a standard required in Chapter 254, and there is no clear method of revising standards in Chapter 254 as science changes. The methodology and revision authority for groundwater standards is found in Chapter 160 and could be interpreted as only applying to standards set through the process prescribed in that same Chapter.

That is not to say that DHS has no role in determining water quality standards for potentially toxic substances; the process for that is already well defined in § 254.02(3)(a), and can be accomplished without listing PFOA and PFOS in the Toxic Substance Subchapter of 254. In fact, § 254.02(3)(a) *requires* DHS to work with DNR to perform a health risk assessment on these compounds, and to help DNR set standards for them (DNR "shall" enter into an MOU with DHS). Section 254.02 links DHS's expertise to DNR's authority to regulate air and water quality, negating the need to list specific ground water contaminants in Chapter 254.

It appears that adding these compounds to Chapter 254 will result in debate over agency authority and that will further draw out the process and muddy the regulatory waters around PFOA and PFOS.

Chapter 160 (Groundwater Protection Standards) on the other hand, is the correct place for this legislation. The legislative intent of Chapter 160 could not be clearer: to "establish an administrative process which will produce numerical standards...for substances in groundwater." (Wis. Stat. §160.001(1)).

In fact, DNR has already begun the process laid out in §160.07 of establishing enforcement standards for PFOA and PFOS. DNR categorized the two compounds as Category 1, assigned them a high ranking within the category, and then requested DHS recommend a standard for them. (See letter 3/21/2018 from DNR to DHS).

The main concern this legislation addresses is the length of time it is taking for DHS to make a recommendation to DNR. Section 160.07(5) requires DNR to propose rules implementing DHS's recommendations within 9 months of requesting the recommendation from DHS, but neither it nor Chapter 254 set a timeline for DHS to develop a recommendation. Thirteen months have passed since DNR's original request. DHS has yet to make a recommendation, and consequently DNR has yet to begin rulemaking. The legislature is correct to be frustrated with the agencies for not following the statutory timeline.

But this frustration can be remedied by simply adding the proposed language to §160.07. In addition, the rulemaking process for PFOS and PFOA limits would be the same as every other groundwater standard and could begin immediately upon transmission of the numbers to DNR.

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Moreover, adding this requirement to Chapter 160 will ensure that the standards will change if EPA's recommendations change, or if science further develops. Chapter 160 has a built-in process for revision of standards based on changing science. (see § 160.07(5)(e) and (6)). That process is followed for all groundwater standards set through Chapter 160. Once again, the sections of §160.07 that allow for adjusting standards only refer to standards set using the process in the same chapter. Absent new legislation, it is unclear how standards set in Chapter 254 could be adjusted as science advances.

Finally, as explained above, the methodology by which DHS sets all other groundwater standards developed through Chapter 160 may not apply to a standard developed in Chapter 254. Adding this requirement to Chapter 160 rather than Chapter 254 will ensure the statutory methodology for setting standards is followed, allow the agencies to revise the standards as science changes, ensure that DNR maintains enforcement authority of the standards, and allow rulemaking to begin immediately following DHS's recommendations.

- III. The legislation should prescribe specific risk assessment methodology for setting PFOA and PFOS standards.

If the standards are established under Chapter 160, DHS has two options for developing recommendations for PFOS and PFOA: they can adopt the 'federal number' or they can recommend a different, justifiable number based on significant technical information which is scientifically valid and which was not considered when the federal number was established. (§160.07(4)(a),(e)). 'Federal number' means either an enforceable regulation set by EPA or a suggested advisory number from EPA. In this case, there is not yet an enforceable limit from EPA, but DHS *could* rely on EPA's non-enforceable, non-regulatory advisory level of 70 parts per trillion as the federal number, which "offers a margin of protection for all Americans throughout their life from adverse health effects." See <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>. That number is an overly conservative limit at which no harm can be linked to the compounds, and is meant to be a placeholder while EPA researches and develops a more reasonable limit. DHS should not simply adopt that advisory limit.

Given that 13 months have passed, it is likely that DHS is following the latter option of developing a number different from the federal number. WPC agrees with this approach, but it is imperative for this legislation to prescribe a methodology for assessing risk in setting those standards.

General methodology for establishing standards is found in §160.13, and gives DHS similar options for setting daily intake for substances: either accept EPA's recommendation or develop a different number based on the most recent science. Since EPA has not set a daily intake for these compounds, DHS can calculate one based on the considerations in §160.13. However, through this process, DHS has significant discretion in calculating a standard because the agency, on its own, determines the acceptable risk level for the substance. (See §160.13(2)(b)3 explaining the uncertainty factor).

The good news is that risk is determined mathematically. Generally, regulators rely on either a deterministic risk assessment (DRA) or a probabilistic risk assessment (PRA) when determining the acceptable risk level for a contaminant. The difference is that PRA considers the probability of individual risk components while DRA considers the worst-case assumption for each risk component and multiplies the risks together which result in incredibly low limits based on 'not-in-the-real-world' sets of conditions. A PRA analysis might result in a 0.00001 risk rate while, for the same set of conditions, a DRA analysis might result in a 0.00000001 risk rate. One example of this is EPA's risk analysis for Human Health

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Water Quality Criteria. The DRA results in 1: 10 million risk factor, which translates to an increase in the number of cancer cases nationwide by 0.5 cases. The PRA, on the other hand, will range from a 1:1 million to a 1:100,000 risk factor, which is estimated to increase cancer by 5 and 48 cases per year nationwide. (<https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2019.html>). As this example illustrates, the PRA is still very conservative, and represents a low risk tolerance, but it is a more reasonable approach to setting regulatory standards.

Consequently, if groundwater standards are set for PFOS and PFAS at 70 parts per trillion using DRA approach versus 400 parts per trillion using a PRA approach, there can be orders of magnitude greater compliance costs under the DRA-derived limit yet there is no measurable health benefit in real world terms.

In this instance, PRA is the more appropriate approach and should be prescribed in the legislation. Given the uncertainty surrounding the variables that impact the health risks of PFOA and PFO, it is imprudent to rely on one single, conservative (worst-case) limit. Though PFOA and PFOS are the most widely studied PFAS, the science is still very much developing and a specific level of acceptable risk has not been developed with any certainty for these compounds. Therefore, the best approach is to consider a range of probable exposures and risks when setting the limit.

Moreover, the process at DHS thus far has not been transparent, and stakeholders have had little or no ability to provide input on how these standards are derived. By prescribing a method, the legislature will assist stakeholders in understanding the resulting standard.

IV. The standard should not be more restrictive than EPA's enforceable limit.

As noted above, the science surrounding PFOA and PFOS is still developing. Given the uncertainty surrounding these compounds, DHS should follow EPA's lead on setting enforceable standards. EPA has significant resources dedicated to research and development of groundwater and drinking water limits for PFOA and PFOS. They have laid out a plan for studying these compounds and their impact on human health and setting enforceable standards accordingly. However, reliable scientific research takes time and Wisconsin should be patient as that research develops. Rushing to set a standard based on developing science can result in overregulation, and significant economic impact for no measurable health benefit.

That is not to say DHS should not work on determining a standard now. But ultimately, the limits set by DHS should be based on the science that has been fully developed, and not on speculation of where the science might lead. One way to ensure this is to require that DHS's standard be no more restrictive than EPA's enforceable regulatory limits, and to require DHS to revise standards if EPA sets limits that are less restrictive than DHS's prior recommendation.

In addition, DHS must consider the testing and treatment methods available when setting a standard. There are currently very few labs that can use the EPA validated method to test for these compounds, and the testing is onerous and expensive. There is also a lack of well-developed treatment methods available for the regulated community. Moreover, many of our members rely on pulp and other recycled input material that already contains PFAS or PFOA. All of these things should be considered by DHS and DNR as the regulatory process continues.

WPC Testimony on 2019 AB 85

V. Conclusion

As we've seen in many other areas of air and water regulation, the quality of the input determines the quality of the regulation. Responsible regulation requires methods that are transparent and data-driven so the regulated community can meaningfully participate. Though WPC thinks 90 days is a reasonable amount of time for DHS to develop at least preliminary standards based on existing scientific studies, we believe this legislation should provide a more detailed framework for DHS to do so, including mandating the risk assessment methodology and providing the opportunity to adjust the standard if science proves it to be too more restrictive than necessary to protect human health. We also believe the rulemaking process should be followed to allow ample time for input on the methods of developing *and* enforcing standards for PFOS and PFOA.

Thank you for the opportunity to testify on this important piece of legislation.

Joint Position Statement Supporting Regulation of PFAS as a Class



Per- and polyfluoroalkyl substances (PFAS) are a large group of man-made toxic chemicals used to make consumer products resistant to water, grease or stains. Human health studies have shown that exposure to certain PFAS may affect growth, learning, and behavior of infants and older children, lower a woman's chance of getting pregnant, interfere with the body's natural hormones, increase cholesterol levels, affect the immune system, and increase the risk of cancer.¹

The major types of human exposure sources for PFAS include contaminated drinking water and food contaminated with PFAS, including fish and shellfish. Other human exposure pathways include incidental soil/dust ingestion, dermal exposure and inhalation.

Approaching PFAS as a class for assessing exposure and biological impact is the best way to protect public health.² Assessing risks of chemicals having a similar mechanism of toxicity is not unusual and is similar to how other chemical groups such as dioxins and PCBs have been assessed and regulated.

A class approach is also consistent with environmental field data which consistently finds PFAS as a mixture of widely varying relative ratios and combinations which, in turn, may shift in response to other factors such as aerobic conditions. And further, a class approach is made necessary by the fact that manufacturers and responsible parties uniformly refuse to disclose PFAS product content and composition, arguing that such information is proprietary.

So far, 26 PFAS chemicals have been detected in or pose a threat to the Wisconsin's groundwater,³ and as analytical methods for PFAS continue to evolve and improve, this number will quickly escalate.

For these reasons, we are unable to support regulations or corresponding legislation that address only a very few PFAS compounds and that address only one pathway of exposure such as groundwater.

ENDORSED by the following Wisconsin organizations:

Casa Maria Community
Code PFAS
Citizens for Safe Water Around Badger
Clean Water Action Council of Northeast Wisconsin
Concerned Friends and Neighbors
Crawford Stewardship Project
Family Farm Defenders
Farms Not Factories
Fire Fighter Cancer Foundation
Four Lakes Green Party
Headwater LLC
Midwest Environmental Advocates
Midwest Environmental Justice Organization

Nukewatch
PFAS Community Campaign
Physicians for Social Responsibility Wisconsin
Sierra Club – John Muir Chapter
Sustain Rural Wisconsin Network
Twin Ports Action Alliance
Wisconsin Conservation Voters
Wisconsin Environmental Health Network (WEHN)
Wisconsin Environment
Wisconsin Network for Peace, Justice & Sustainability
Wisconsin Resources Protection Council
Wisconsin Wildlife Federation

For more information, contact:

Laura Olah, Coordinator, PFAS Community Campaign – 608.643.3124 – info@cswab.org – www.CSWAB.org

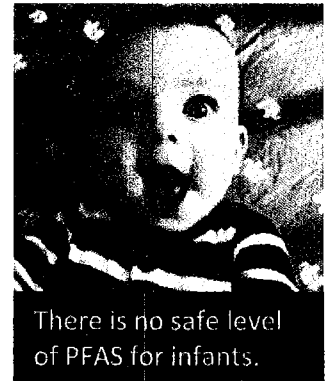
¹ CDC/ATSDR to Assess PFAS Exposure in Communities Near U.S. Military Bases, Press Release, February 21, 2019.

² Dr. Birnbaum (Director of the National Institute of Environmental Health Sciences and National Toxicology Program of the National Institutes of Health) in testimony before the Senate Committee on Homeland Security and Governmental Affairs, Subcommittee on Federal Spending Oversight and Emergency Management, Sept. 26, 2018.

³ S. Elmore, Wisconsin DNR, January 17, 2019 correspondence to Laura Olah, Executive Director, Citizens for Safe Water Around RE: Public Petition for Health Advisory Levels for PFAS in Groundwater and Drinking Water with Emphasis on the Tyco/Johnson Controls PFAS site - BRRTS Activity No. 02-38-580694.

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Testimony before the Wisconsin Assembly Committee on Environment
Thursday, April 4, 2019
Regarding Assembly Bill 85 - PFAS



Good afternoon. Thank you for the opportunity to address the committee today.

As Executive Director of Citizens for Safe Water Around Badger, I have worked on military toxics issues in Wisconsin for nearly 30 years. I have a personal interest in military cleanups as my own drinking water well is regularly tested by the U.S. Army for explosives contamination from the Badger Army Ammunition Plant in Sauk County.

In 2006, we successfully petitioned the State for drinking water standards for perchlorate – a toxic compound found in munitions – and today, Wisconsin has one of the most protective standards in the U.S. at 1 part per billion.

In 2010, we successfully petitioned the State for standards for the explosive DNT and today, Wisconsin is the only state with health-based standards for all six forms of this chemical mixture.

Two years ago, we turned our attention to PFAS when environmental testing by the Department of Defense confirmed high concentrations of these chemicals were detected at military bases around the U.S. and here in Wisconsin.

Of the more than 11,000 public drinking water systems tested in Wisconsin, only 90 have been tested for PFAS.

In August 2018, CSWAB formally petitioned the Wisconsin DNR for a Health Advisory Level (HAL) for the summed-total concentration of all PFAS – including precursors – detected in the State's groundwater and/or having a reasonable probability of entering groundwater such as presence in soils. Five months after we submitted our citizen petition, in January of this year, the Wisconsin DNR granted our request for regulating 26 PFAS compounds which includes PFOA and PFOS. To date, however, the DNR has not forwarded its request to the Wisconsin Division of Health so state toxicologists can officially begin their work.

Additional recommendations from our organization will be submitted to the committee in writing (posted below).

I am also here today, to submit a joint position statement supporting the regulation of PFAS as a Class which I would like to read into the record. It has been co-signed by ²³ environmental, health and conservation organizations – all from Wisconsin. ₂₅

CSWAB Goals for Ending and Preventing Exposures to PFAS

- ▶ Interim Health Advisory Levels will be issued by state health officials now for the summed-total concentration of all PFAS including precursors.
- ▶ Analysis of fish tissue will be conducted now at known PFAS-contaminated sites including Truax ANG, Fort McCoy and the Tyco/Ansul facility in Marinette.
- ▶ Private well water users (4-mile radius), public water system operators and tribes (10-mile radius) will be immediately notified of discovered PFAS groundwater contamination.
- ▶ ALL public water supply systems will be analyzed for PFAS. (Michigan has initiated this same effort.)
- ▶ A comprehensive statewide inventory of known and potential PFAS sources will be initiated.
- ▶ Protective state standards for all environmental media will be established for all PFAS including precursors.
- ▶ Better analytics will be utilized to detect all PFAS including precursors.
- ▶ Effective treatment methods that do not re-disperse PFAS to the environment will be developed and deployed.
- ▶ A cost recovery plan will be developed and implemented.
- ▶ By a date certain, the manufacture and use of PFAS will be banned.

Doug Oitzinger
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April 4, 2019

AB 85 Testimony

My name is Doug Oitzinger. I am the former Mayor of the City of Marinette. I live in the most contaminated PFAS area in the State of Wisconsin and I am here to testify against Assembly Bill 85 as drafted. I live three blocks from the Tyco/Johnson Controls contaminated Fire Technology Center property. While I have municipal drinking water, my neighbors two blocks south of me have PFAS contaminated wells.

I am opposed to this bill not because of what it proposes to do, but because of what it does not propose to do. First, AB 85 only deals with two PFAS compounds: PFOA and PFOS. The DNR has agreed with a consensus of statewide advocacy groups to include 24 additional PFAS compounds beyond PFOA and PFOS into their research to establish standards for Wisconsin.

Second, any standards established must also use "sum total" levels in the regulations so various levels of different compounds are added together for a total PFAS contamination limit. For example, Vermont lists five different PFAS compounds in its Health Advisory Limit and any combination of those five compounds that exceed 20 PPT is deemed to be unacceptable. If we had the Vermont standard today, the number contaminated wells in the Town of Peshtigo that exceed the EPA Health Advisory Level would more than double. AB 85 doesn't combine PFAS levels even for the two compounds identified.

Third, AB 85 only applies to groundwater. It does not address surface water, soil, landfill regulation, or air contamination. Right now, in our city, the Wastewater Treatment Plant is holding its biosolids or "sludge" at the request of the DNR because it is contaminated with PFAS to a level exceeding 210,000 PPT. In the past, this sludge was spread on agricultural land but that is now out of the question. The choices will be to incinerate it or to landfill it and Wisconsin doesn't have PFAS regulations for either. The Bill doesn't address

this or regulate factories disposing of PFAS contaminated products through a municipal sewer as Tyco/Johnson Controls has done.

AB 85 doesn't address discharging PFAS into surface water, meaning rivers and lakes. Our Wastewater Treatment Plant, while capturing a large amount of PFAS contamination that it was never designed to do, is still discharging a great deal of it into the Menominee River after treatment.

AB 85 doesn't create a standard for drinking water that comes from surface water. Our utility draws its water from the Bay of Green Bay to treat for drinking. Many of Wisconsin's largest cities extract their drinking water from surface water and discharge their treated waste back into the same surface water.

I would urge the committee to amend AB 85 to address these issues I have outlined because I doubt that more than one bill has a chance of making through the Legislature in this session. I appreciate its authors concern for the very real and urgent need for Wisconsin regulation of PFAS compounds, but I urge them to work with the DNR, DHS and citizen advocacy groups to establish a strong and comprehensive legislative response to the risks from PFAS contamination to human health and our environment. AB 85 does not do that as drafted.

Finally, I would like to invite all of you to attend a citizens' presentation and public meeting on the Tyco/Johnson Controls contamination problem in the Marinette area this coming Monday, April 8th in our High School at 6:30 PM. Thank you.