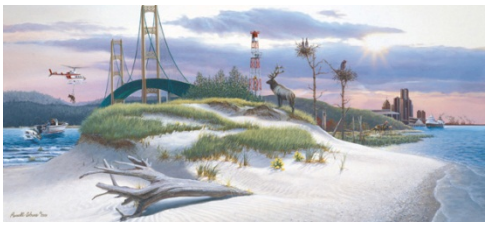

MICHIGAN ENVIRONMENTAL LAW JOURNAL
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Message From Chair Bill Schikora

The recent water crisis in Flint and the never-ending debate over what constitutes waters of the United States are just two recent examples of the national importance of environmental law in Michigan. We are the Great Lakes State, and it is with great pleasure that I accept the role of chair of the Environmental Law Section this year. I hope to live up to the legacy of those who preceded me and maybe inspire those who are just starting their careers. It is the latter point that will be a major area of focus this year. If you have been to a Section meeting recently, you have no doubt noticed that we are all aging (gracefully) and there aren't many younger folks joining our profession.

The Great Recession certainly took its toll on our profession, but markets can be fickle. They go from over-valued to under-valued, and the market for environmental lawyers is no exception. I have spoken to a number of environmental law professors and always ask the same question: are law students interested in environmental law? The answer is always yes, so I am confident there is a great pipeline of young talent ready to join our profession when the time comes. To that end, I will be heading up a Strategic Planning Committee this year that will, among other things, see what our section can do to involve younger lawyers or those who would like to become environmental lawyers. The committee is formed, but if you have any interest or insights I invite you to share them with me.

I would also like to take this opportunity to thank Lee Johnson for his leadership last year. Our section membership is down somewhat, and Lee got us back on a strong financial footing. Long-term sustainability of our section is another focus area of our Strategic Planning Committee.

Finally, I'd like to thank the various committee chairs for their continued efforts to bring us some of the best continuing education I've ever seen in the form of seminars, webinars, the *Environmental Law Journal*, and the Deskbook. That content alone is well worth the modest price of admission to our Section. If you haven't taken a look recently, you should.

Let's make it a great year.

-Bill

Message From the Editor

It's a new fiscal year for the Environmental Law Section and for the *Journal*. In accordance with the Council's budget, we plan to publish only two issues this year; this issue and a second for spring and summer.

On December 12, 2015, the parties to the United Nations Framework Convention on Climate Change announced what some have called a groundbreaking international plan to control emissions of greenhouse gases. Last summer the White House announced the most important regulatory program it will use to meet its commitments under the new international agreement: the Clean Power Plan (CPP). In contrast with the nationally uniform standards that control greenhouse gas emissions from motor vehicles, the CPP relies on relatively obscure section 111(d) of the Clean Air Act, which provides for setting state-by-state standards to reduce emissions from stationary sources (in this case, fossil-fired electric power generating units). The CPP establishes a different emission reduction goal for each state and requires each state to develop and implement a plan to achieve its federally mandated goal. Assuming the CPP withstands legal challenges, how will it affect the State of Michigan? Jamie Scripps of 5 Lakes Energy LLC tackles that subject in an excellent article that briefly explains the CPP's main points, identifies several potential legal problems, and explains what Governor Snyder's administration is doing to develop an implementation plan for the CPP in Michigan. Additional information is available at www.michigan.gov/carbonrule.

Our second article discusses an October 2015 decision by the United States Court of Appeals for the Second Circuit that requires EPA to rethink, and probably rewrite, a Clean Water Act general permit intended to prevent the spread of invasive species by regulating ballast water discharges. In contrast with the newer issue of climate change, it seems that invasive species in the Great Lakes have nearly always been with us. For example, sea lampreys are believed to have spread to the upper Great Lakes through the Erie Canal in the early 1800s and the Welland Canal in the early 1900s. The opening of the St. Lawrence Seaway and discharges of untreated ballast water by oceangoing ships and lake freighters have contributed to the spread of additional invasive species. Efforts by the Coast Guard and EPA to control the problem have not been as robust as many environmental groups believe they should be, and the Second Circuit's remand order will require EPA to consider taking more effective action to control this problem. The article identifies several ways in which the history of EPA's reluctant regulation of ballast water discharges is similar to its history of regulating greenhouse gas emissions. I hope that piques your interest enough to persuade you to read the article.

We would like to print at least two or three articles in each issue of the *Journal* and would warmly welcome an article by you. Your article doesn't have to be long; our readers prefer articles that are concise and of practical value. If you have an idea you'd like to write about, contact me at cdunsky@comcast.net or at (313) 418-0913.

Christopher J. Dunsky
Editor, *Michigan Environmental Law Journal*

Upcoming Event

Clearing the Air in 2016: An Overview of Federal, Regional, & State Air Quality Issues

Date: Thursday, April 14, 2016; 8:30 a.m.–1 p.m.
Location: MMA Headquarters, Lansing
Cost: $60 thru March 23, $85 after
Register with MMA

7th Annual Conference co-sponsored by the MMA and the Air Committee of the Environmental Law Section of the State Bar of Michigan. This half-day program features updates on the most urgent environmental regulatory issues facing Michigan companies. Experts from government, industry, advocacy groups, and the legal profession will address the latest developments and what to expect.

How Will the "Clean Power Plan" Affect Michigan?

Jamie Scripps, 5 Lakes Energy LLC

On August 3, 2015, the Obama administration finalized new rules aimed at reducing carbon pollution from the power generating sector. These rules, known as the "Clean Power Plan," are an important step in curbing a major contributing factor in climate change.[1] Section 111 of the

Jamie Scripps is a principal with 5 Lakes Energy LLC, a policy consulting firm specializing in clean energy and sustainability, where she co-leads the firm's federal policy practice. Ms. Scripps is a 2005 graduate of the University of Michigan Law School, and a member of the DC Bar, the Virginia State Bar, and the State Bar of Michigan.

[1] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed Reg. 64,661, October 23, 2015.

federal Clean Air Act[2] and the U.S. Supreme Court's decision in *Massachusetts v. EPA*[3] provide the legal authority for the Clean Power Plan.

Section 111 requires the U.S. Environmental Protection Agency (U.S. EPA) to regulate a source which "causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare."[4] In *Massachusetts v. EPA*, the U.S. Supreme Court held that greenhouse gases, including carbon dioxide emissions from motor vehicles, meet the Clean Air Act's definition of an air pollutant. As a result, the U.S. EPA is required to treat carbon pollution as an air pollutant, and to decide whether carbon dioxide from vehicle emissions causes or contributes to endangerment of public health and welfare.

Building upon this decision, in June 2013, President Obama announced his Climate Action Plan, which directed the EPA to develop carbon pollution standards specifically for the power generating sector[5]. The result is the Clean Power Plan, a historic move to comprehensively address carbon dioxide emissions from this carbon-intensive sector. "Carbon dioxide (CO2) is the primary greenhouse gas [GHG] pollutant, accounting for roughly three-quarters of global greenhouse gas emissions in 2010 and 82% of U.S. greenhouse gas emissions in 2013. Fossil fuel-fired electric generating units (EGUs) are by far the largest emitters of GHGs, primarily in the form of CO2, among stationary sources in the U.S."[6] The U.S. EPA expects the Clean Power Plan to reduce power sector carbon emissions by 32% (from 2005 levels) by 2030, with individual state targets tailored to each state's power generation mix.

With these individualized targets in mind, states will play a key role in implementing the Clean Power Plan. Section 111(d) of the Clean Air Act requires states to develop their own plans for regulating pollutants from existing stationary sources whenever the U.S. EPA promulgates a standard for new sources in a particular category. These state implementation plans, known as Section 111(d) plans, are subject to federal approval and allow states to customize their responses to the new rules. If a particular state fails to come up with its own plan, the state will be subject to a federal plan. Valerie Brader, the executive director of the newly-created Michigan Agency for Energy (MAE), has indicated that Michigan intends to develop and submit

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[2] 42 U.S.C. §7411.
[3] *Massachusetts v. EPA*, 549 U.S. 497 (2009).
[4] 42 U.S.C. §7411 (b)(1)(A).
[5] Executive Office of the President, The President's Climate Action Plan, June 2013, p. 6.
[6] U.S. EPA, Regulatory Impact Analysis for the Clean Power Plan Final Rule, August 2015.

its own state implementation plan by September 6, 2016, in order to maintain control of its energy future.[7]

While Governor Snyder's administration apparently intends to comply with the mandate of the Clean Power Plan, Attorney General Bill Schuette opposes it. In August, he added Michigan to a multi-state emergency petition to the U.S. EPA to delay implementation of the Clean Power Plan, which was denied. Mr. Schuette has indicated he is considering joining another lawsuit now that the rule is final. On behalf of the Snyder administration, Ms. Brader has stated that Michigan will comply and will not challenge the Clean Power Plan in federal court, explaining that Attorney General Schuette is acting "in his individual capacity"[8] in challenging the rules.

The new rules enumerate three "building blocks" for state compliance—on-site energy efficiency improvements at coal-fired power plants; increased use of zero-carbon generation, such as wind and solar; and increased use of natural gas. Challengers argue that the inclusion of zero-carbon sources such as renewables and natural gas which fall "outside the fence line" of a generating plant as a "building block" to achieve compliance with the new targets for CO2 reduction is outside the scope of the Clean Air Act. By contrast, those defending the Clean Power Plan are confident that the Clean Air Act leaves it to the U.S. EPA to determine the appropriate boundaries of any compliance effort.[9]

Another legal challenge to the Clean Power Plan is based upon an apparent discrepancy between the House and Senate versions of the 2008 amendments to the Clean Air Act. The House version appears to prohibit power plant regulation under Section 111d, since they are already regulated under the air toxics program in Section 112. Alternatively, the Senate version is concerned with whether a second rule is created to regulate a pollutant that is already being regulated. Proponents argue that the "EPA has not regulated greenhouse gases previously, and the agency argues it deserves deference from the courts in choosing the Senate version."[10]

While some legal uncertainty will remain as these issues work their way through the courts, momentum is on the side of implementation of the new rules as states begin the process of crafting their individual plans. As Governor Snyder's administration convenes its stakeholder process, Michigan will be charting a course for achievement of state-specific carbon emission levels that have been set by the U.S. EPA.

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[7] Andy Balaskovitz, *Midwest Energy News*, Michigan Announces State-Based Strategy to Comply With Clean Power Plan, September 1, 2015.
[8] Paul Egan, *Detroit Free Press,* Michigan Will Comply With Carbon Reduction Plan, September 1, 2015.
[9] E&E Publishing, Legal Challenges—Overview & Documents.
[10] *Id.*

The Clean Power Plan establishes overall interim and final target emission rates for carbon from steam electric and natural gas-fired power plants. The rules also establish custom interim and final goals for each state, based on the overall target emission limits and the state's unique power generation mix. Michigan has the option of using either a rate-based emission reduction approach (carbon pounds per MWh) or a mass-based approach (total tons of carbon). Measured by emission rate, the rules require Michigan to achieve a rate of 1,169 carbon pounds per MWh generated from EGUs or earned through low-carbon generation or customer efficiency programs. This target is down about 39% from the historic baseline of 1,928 carbon pounds per MWh in 2012, and down roughly 26% from the 2020 projection of 1,588 carbon pounds per MWh.[11] A mass-based measurement requires a reduction to 47,544,064 total tons of carbon from a 2012 baseline of 69,860,454 tons, and a 2020 projection of 54,837,037 tons.[12] If Michigan uses a mass-based goal, the new rules will require that Michigan demonstrate that carbon reductions from existing sources do not lead to increases in emissions from new sources.[13]

Because the rules use 2012 as the baseline year for measuring carbon reductions, Governor Snyder's administration is disappointed that Michigan will not receive credit under the Clean Power Plan for carbon reductions from renewable energy development and energy efficiency improvements made before 2012. Ms. Brader has stated that the Clean Power Plan rules "reward delay over early action,"[14] particularly when it comes to renewable energy.

Prior to the promulgation of the Clean Power Plan, Michigan had already seen strong investment in the development of wind and solar energy projects as a result of the passage of the Michigan "Clean, Renewable, and Efficient Energy Act" in 2008 (PA 295 of 2008). According to the Michigan Public Service Commission (MPSC), "Statewide, there has been significant investment in the renewable energy sector since the passage of PA 295 in 2008. Assuming an installed cost of $2,000 per kW for new renewable energy projects, $2.9 billion has been invested to bring approximately 1,450 MW of new renewable energy projects on-line through 2014 in Michigan."[15] The law's energy efficiency standard has had a similar impact. According to a recent MPSC report, "E[nergy] O[ptimization] programs across the state accounted for electric savings totaling over 1.4 million MWh (megawatt hours) and natural gas savings totaling over 4.86 million Mcf (thousand cubic feet) for program year 2014. Those numbers

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[11] U.S. EPA, Clean Power Plan: State at a Glance, Michigan.
[12] *Id.*
[13] *Id.*
[14] Jay Greene, *Crain's Detroit Business*, Michigan to Develop Own Carbon Reduction Plan to Comply With EPA Rules, September 1, 2015.
[15] Michigan Public Service Comm'n, Report on the Implementation of the P.A. 295 Renewable Energy Standard and the Cost-Effectiveness of the Energy Standards, February 13 2015, p. 23.

equate to approximately 172,500 households' annual electric usage, and around 57,000 households' annual natural gas usage."[16]

Renewable energy and energy efficiency investments made after 2012 will count toward compliance with the rules, and will play a key role in moving Michigan's power-related carbon emissions in the right direction. There is also an extra incentive for renewable energy—particularly wind and solar—under the voluntary add-on to the Clean Power Plan called the "Clean Energy Incentive Program." This program is optional, but if Michigan added the program to its implementation plan, it would give Michigan extra compliance credits in 2020 and 2021 for wind and solar generation and energy efficiency measures in low-income communities.[17]

This fall, the MAE will initiate a stakeholder process to begin gathering information and comments on the development of Michigan's implementation plan. Two major utility stakeholders, DTE and Consumers Energy, support Michigan's effort to develop its own plan and agree with Ms. Brader that it is important for Michigan to "maintain control of its energy future."[18] One of the express goals of the MAE stakeholder process will be to identify the most cost-effective power generation and efficiency mix for Michigan's compliance with the Clean Power Plan.

5 Lakes Energy and the University of Michigan developed a model for this purpose, the State Tool for Electricity Emissions Reduction (STEER), which is being used by eight states in the development of state implementation plans. The STEER analysis for Michigan, published by the Institute for Energy Innovation, shows that "reducing energy waste is Michigan's least-cost tool for complying with the Clean Power Plan."[19] Additionally, "[l]east-cost generation options represent a tradeoff between natural gas, cogeneration, and renewable energy, depending on the long-term projected cost of natural gas."[20]

The Legislature will need to amend certain statutes in order for Michigan to comply with the Clean Power Plan at the lowest cost. Michigan is not the only state facing this task. According to the National Conference of State Legislatures, "[s]o far in the 2015 session, legislatures in 31 states introduced 89 bills or resolutions related to the Clean Power Plan and power plants'

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[16] Michigan Public Service Comm'n, 2015 Report on Energy Optimization Programs and Cost-effectiveness of PA 295 Standards, September 30, 2015, p.1.
[17] U.S. EPA, The Clean Power Plan: Clean Energy Incentive Program.
[18] Emily Lawler, MLive, Utilities Support Michigan Curbing its Own Carbon Under Federal Clean Power Plan, September 2, 2015.
[19] Institute for Energy Innovation, Michigan and the Clean Power Plan: Assessment of Cost-Effective Compliance Options, July 2015.
[20] *Id.*

carbon dioxide emissions regulations. Specifically, 24 states have introduced 60 bills and seven states have enacted legislation."[21] In Michigan, Senator Mike Nofs, chair of the Senate Energy & Technology Committee, and Representative Aric Nesbitt, chair of the House Energy Policy Committee, have spearheaded a review of Michigan's existing energy laws. However, while Michigan's lawmakers understand the need to accommodate the Clean Power Plan, it remains unclear how the Legislature and Governor Snyder will ultimately resolve compliance with the new rules.

With the need to reduce carbon emissions from power plants, energy efficiency and renewable energy development are increasingly important to Michigan's power generation mix. Under current state law, however, it may not be possible for Michigan to achieve adequate energy efficiency improvements or wind and solar deployments in time for the state to achieve the Clean Power Plan goals. For example, Michigan's 2008 renewable energy standard requires that at least 10% of the electricity that electric suppliers sell to retail customers come from renewable energy sources by this year. According to the MPSC, "[a]ll providers are expected to be able to meet the 10% renewable energy standard in 2015."[22] If the utilities meet this standard this year, there will be a need for a new mechanism such as another renewable energy standard, or an integrated resource planning process, or some combination of both, to assure that Michigan is generating enough renewable energy to adequately cut carbon in its power generating sector.

Lawmakers should also bolster the state's efforts with energy efficiency or "energy optimization" (EO). Michigan's current EO standard requires utilities to provide energy efficiency programs that create savings of 1% of retail sales of electricity, and 0.75% of retail sales of natural gas.[23] PA 295 also includes spending and rate-recovery caps in its energy optimization section. These caps prohibit a utility from spending more than 2% of total retail sales revenues from the previous two years on EO programs, and prevent a utility from increasing its rates to recover any costs which exceed 1.7% of total retail sales revenue for natural gas providers and 2.2% of total retail sales revenue for electric utilities.[24] The Legislature will need to amend the state statute to remove these barriers to energy efficiency, Michigan's least cost option for complying with the Clean Power Plan, so that Michigan can achieve its carbon reduction goals in the most cost effective manner.

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[21] Melanie Condon & Jocelyn Durkay, National Conference of State Legislatures, States' Reactions to EPA Greenhouse Gas Emissions Standards: 2015 State Action, February 3, 2016.
[22] Michigan Public Service Comm'n, Report on the Implementation of the P.A. 295 Renewable Energy Standard and the Cost-Effectiveness of the Energy Standards, February 13, 2015.
[23] MCL 460.1077(1)(d)& (3)(d).
[24] MCL 460.1089(3).

Even without the impetus of the Clean Power Plan, it would make good economic sense for Michigan to increase energy efficiency even more than what is required under current law. Since their inception in 2008, Michigan's EO programs have been incredibly cost-effective. According to the MPSC, "For every dollar spent on EO programs in 2014, customers should expect to realize benefits of $4.38."[25] There is significant cost-effective energy efficiency potential remaining. According to a 2013 study by the MPSC, DTE, and Consumers Energy, "[f]or the state of Michigan overall, the achievable potential for electricity savings in 2023 is 15% of forecasted kWh sales for 2023. The achievable potential for natural gas savings in 2023 is 13.4% of forecasted MMBtu sales for 2023."[26] In light of this potential, strong energy optimization programs should be a major component in Michigan's plan to achieve the carbon reductions required by the Clean Power Plan.

Overall, the new rules present a challenge to our lawmakers, and a chance for all Michigan residents to benefit from a cleaner, more efficient energy system. Michigan has an obligation to act, and an opportunity to seize the benefits of the Clean Power Plan's call for an energy transformation.

Second Circuit's Remand of EPA Vessel General Permit May Reduce Invasive Species in Discharges of Ballast Water

Christopher J. Dunsky, Christopher J. Dunsky PLLC

Introduction

Most Michiganders are familiar with the story of how zebra mussels, quagga mussels, and many other aquatic invasive species arrived in the Great Lakes in the ballast water of oceangoing vessels that sailed up the St. Lawrence Seaway to the Great Lakes. Ore freighters and other vessels that sail only on the Great Lakes have also exacerbated the spread of invasive species by taking on ballast water in one Great Lake and discharging it in another.

Spurred by environmental groups to address the problem, the EPA issued Clean Water Act (CWA) general permits in 2008 and in 2013 that allowed certain vessels as "point sources" to discharge ballast water only if the water is first treated to kill most organisms.

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[25] Michigan Public Service Comm'n, 2015 Report on Energy Optimization Programs and Cost-effectiveness of PA 295 Standards, September 30, 2015, p.1.

[26] *Id.* at p.12.

Several environmental groups recently persuaded the United States Court of Appeals for the Second Circuit that the 2013 EPA permit may be too lenient and should be reconsidered. On October 5, 2015, the Second Circuit agreed with many of the groups' criticisms and remanded the permit for EPA to consider making it more stringent in several important ways.[1] Depending on how EPA responds to the remand, vessels may be required to treat their ballast water more effectively and thus provide greater protection against aquatic invasive species.

EPA's History of Exempting/Regulating Discharges from Vessels

Although vessels are clearly point sources that may not discharge pollutants into waters of the United States without a permit under section 402 of the CWA, 33 U.S.C. 1342, EPA's early regulations exempted vessels from the permit obligation if the discharges, including ballast water discharges, were "incidental" to the "normal operation" of a vessel.[2] More than thirty years later, citizen groups successfully challenged the legal basis for this exemption.[3] As a result of this litigation, EPA issued a "vessel general permit" in 2008 (2008 Permit) that authorized vessels to discharge ballast water but without any specific numerical effluent limitations.[4] After the State of Michigan, several environmental groups, and some industry groups challenged the 2008 Permit, EPA entered into a settlement in 2011 that required EPA to issue a new general permit including: (1) numerical effluent limits for ballast water discharges (expressed as organisms per unit of ballast water discharged) based on best available technology (BAT), and (2) more stringent limits if necessary to comply with applicable water quality standards.[5]

EPA sought help from its Science Advisory Board (SAB) and from an *ad hoc* committee established by the National Academy of Sciences (NAS Committee) to develop terms and conditions for the new permit. EPA asked the SAB to recommend technologies that could minimize the quantity of invasive species in vessel ballast water discharges, taking into account a standard adopted by the International Maritime Organization in 2004 (IMO Standard). The

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[1] *Natural Resources Defense Council v. Environmental Protection Agency*, 804 F.3d 149, 2015 WL 5780393 (2nd Cir. Oct. 5, 2015), amended and superseded by 2015 WL 9245015 (2nd Cir. Dec. 18, 2015).
[2] 38 Fed. Reg. 13,528, 13,530 (May 23, 1973), codified at 40 C.F.R. 125.4 (1973).
[3] *Northwest Envtl. Advocates v. EPA*, 2006 WL 2669042 (N.D. Cal.), aff'd 537 F.3d 1006 (9th Cir. 2008).
[4] 73 Fed. Reg. 34,296 (June 17, 2008).
[5] *NRDC v. EPA*, No. 09-1089 (D.C. Cir. Mar. 8, 2011), ECF No. 1296922.

IMO Standard called for ballast water discharges to contain (1) fewer than ten living organisms larger than 50 micrometers per cubic meter of ballast water; and (2) fewer than ten living organisms between 10 micrometers and 50 micrometers per milliliter of ballast water.[6]

The 2011 SAB report identified five categories of shipboard treatment systems that can satisfy the IMO Standard, and may even be able to comply with more stringent standards.[7]

The NAS Committee report concluded that it was not possible to evaluate the relative merits of alternative discharge standards in preventing invasive species from becoming established in U.S. waters.[8]

EPA then issued a new nationwide vessel general permit (2013 Permit) that contained the same numerical effluent limits expressed in the IMO Standard.[9] EPA adopted these limits as technology-based effluent limits (TBELS) reflecting what was achievable by BAT. EPA declined to impose any limits on the discharge of virus organisms in the 2013 Permit.

The 2013 Permit exempted vessels that sail only on the Great Lakes and that had been constructed before 2009 from complying with any numerical discharge limits on ballast water.[10] EPA's rationale for the exemption was that no treatment technology was available for these "Pre-2009 Lakers" because of their "unique operational and design constraints."[11]

The permit also contained a narrative (*i.e.*, non-numerical) water quality-based effluent limitation (WQBEL) that required vessels to control their discharges "as necessary to meet applicable water quality standards in the receiving water body or another body impacted by [the] discharge."[12]

Second Circuit Remand of 2013 Permit

The Natural Resources Defense Council, the Center for Biological Diversity, Northwest Environmental Advocates, and the National Wildlife Federation filed petitions asking various

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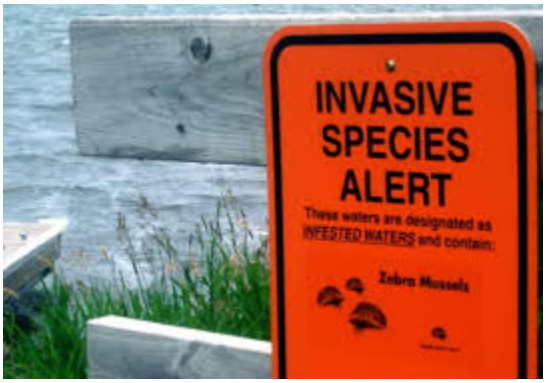
[6] 2015 WL 9245015 at *7.
[7] *Id.* at *6, *9.
[8] *Id.* at *6.
[9] 78 Fed. Reg. 21,938 (Apr. 12, 2013).
[10] 2015 WL 9245015 at *15.
[11] *Id.*
[12] *Id.* at *7.

United States courts of appeals to review the 2013 Permit pursuant to section 509(b)(1) of the CWA, 33 U.S.C 1369(b)(1).

The petitioners challenged the basis for the TBELs in the permit on four grounds. First, they argued that EPA had improperly adopted the numerical limits in the IMO Standard rather than determining what potentially more stringent standards could be achieved by applying various available technologies. The Second Circuit agreed, and concluded that EPA had arbitrarily selected the IMO Standard without adequately explaining why it did not establish a more stringent standard.[13] The court noted that the SAB report identified several treatment technologies that, with feasible modifications, could achieve a level of treatment 100 times more stringent than the IMO Standard for medium size organisms and 10 times more stringent for large organisms. The court concluded that "by failing to consider adequately a standard more stringent than IMO, EPA failed to set permit limits that reflect BAT."[14]

Second, petitioners argued that in evaluating BAT, EPA had failed to consider onshore treatment systems as an alternative to shipboard treatment systems. EPA argued that onshore ballast water treatment facilities could not be considered "best *available* technology" because no such facilities existed. The court rejected EPA's argument because legal precedent holds that BAT for a given industry may consist of a treatment technology used in other industries.[15] The court found that EPA's administrative record did not contain a full discussion of onshore treatment technology options because EPA had directed its SAB to consider the narrow question of "whether *shipboard* treatment systems could meet certain specific sets of standards."[16] In fact, EPA's Office of Water took steps to limit the discussion of onshore treatment technologies in the SAB report.[17] The court concluded that "EPA's failure to consider onshore treatment is inconsistent with the CWA's mandate that TBELs be technology-



[13] 2015 WL 9245015 at *10.
[14] *Id.*
[15] *Id.* at *11.
[16] *Id.* at *12.
[17] *Id.*

forcing."[18] The court concluded that EPA must fully consider both onshore and shipboard treatment technologies on remand.[19]

Third, petitioners argued that EPA should have imposed numeric TBELs on the discharge of viruses. The court rejected that argument because there are no reliable means to analyze water for viruses and because EPA lacked sufficient data to set numeric limits on viruses. [20]

Fourth, petitioners challenged the 2013 Permit's exemption of the Pre-2009 Lakers from complying with any numerical limits on organisms. EPA exempted those vessels partly because it believed there was no effective onboard treatment system for them.[21] The court found this exemption to be arbitrary because: (1) as noted above, the purpose of the BAT requirement is to force the development of treatment technologies, including shipboard technologies; (2) EPA had failed to consider whether onshore treatment could serve Pre-2009 Lakers; and (3) the evidence in the record did not show that there are significant relevant differences between Pre-2009 Lakers and those built later. [22]

When it issued the 2013 Permit, EPA noted that it was possible that ballast water discharges that comply with the TBELs in the 2013 Permit might nonetheless cause violations of water quality standards.[23] To prevent that, the 2013 Permit provided that "[Y]our discharge must be controlled as necessary to meet applicable water quality standards in the receiving water body or another water body impacted by your discharges."[24] The court held that this very general admonition "is insufficient to give a ship owner guidance as to what is expected or to allow any permitting authority to determine whether a ship owner is violating water quality standards."[25] Because the 2013 Permit is a nationwide general permit and potentially applies in more than fifty jurisdictions, each of which has its own water quality standards, it would be extremely difficult for EPA to develop permit language that would clearly and precisely advise vessel owners about what they must do to avoid violating water quality standards at any one of numerous locations in the country. Nonetheless, the court held that the narrative WQBEL in the

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[18] *Id.* at *14.
[19] *Id.*
[20] *Id.* at *14-15.
[21] *Id.* at *15.
[22] *Id.*
[23] *Id.* at *16.
[24] 78 Fed. Reg. 21,938, (Apr. 12, 2013), quoted at 2015 WL at *16.
[25] 2015 WL 9245015 at *16.

2013 Permit was insufficient to ensure compliance with the CWA and thus the 2013 Permit must be remanded.[26]

Although the court remanded the 2013 Permit for EPA to reconsider and correct the errors discussed above, the court allowed the 2013 Permit to remain effective while EPA works on a replacement. If the court had vacated the permit instead of simply remanding it, vessels would have either been subject to the less stringent requirements of the 2008 Permit, or possibly no requirements, or they might have been prohibited from discharging any pollutants at all because the 2008 Permit expired in December 2013. Thus, the remand means that at least until EPA issues a new permit, vessels may discharge ballast water but will have to comply with the terms and conditions of the 2013 Permit.

Analysis & Conclusion

Because the 2013 Permit remains in effect during the remand process, ship owners will have to either install shipboard treatment systems or use other means to avoid discharging untreated ballast water. If ship owners now invest large sums of money in shipboard treatment systems, their investment in shipboard treatment may possibly skew the results on remand against onshore treatment.[27] On the other hand, the loss of the exemption for Pre-2009 Lakers may drive demand for the development of onshore treatment systems, especially if Pre-2009 Laker construction and design make shipboard treatment infeasible.

As recounted above, EPA has a history of being reluctant to regulate discharges from vessels. In many ways, the saga of EPA's approach to ballast water discharges is very similar to EPA's former reluctance to regulate emissions of greenhouse gases under the Clean Air Act. In both cases, EPA declined to regulate for many years and rejected administrative petitions by citizen groups asking EPA to regulate the subject matter.[28] In both cases, the fact that the subject matter was at least partially regulated by another federal agency contributed to EPA's reluctance to become involved. [29] The United States Coast Guard regulates ballast water

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[26] *Id.* at *17-18.

[27] The SAB report noted that "[S]hipboard treatment and onshore treatment represent distinct approaches to ballast water management that would each require different large investments in infrastructure . . . . Thus, *we are almost certain to be stuck for a very long time with whichever approach is used as the BAT* in setting discharge standards in 2013." 2015 WL 9245015 at *14.

[28] *See Massachusetts v. EPA*, 549 U.S. 497 (2007).

[29] The Department of Transportation regulates motor vehicle mileage requirements, which EPA argued was the

containing invasive species under the National Invasive Species Act, P.L. 104-332 (1996), codified at 16 U.S.C. 4701-4751. It issued final regulations for ballast water in 2012.[30] The key difference between these two issues is that EPA has now become thoroughly committed to regulating emissions of greenhouse gases, while its commitment to effectively regulating ballast water discharges remains in doubt.

When they succeed at all, efforts by citizen groups and states to require federal agencies to deal effectively with a particular environmental problem often take many years. EPA's regulation of ballast water discharges comes too late to do much about invasive species that have already arrived in the Great Lakes and other U.S. waters. But depending on what action EPA takes on the remand in this case, those efforts may result in more stringent discharge standards and more effective treatment for removing invasive species from ballast water than EPA was willing to accept as the best available technology in 2013.

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only effective way to limit carbon dioxide emissions from vehicles. *See Massachusetts v. EPA*, 549 U.S. 497 (2007).

[30] 77 Fed. Reg. 17,254 (March 23, 2012).