

TEXAS ENVIRONMENTAL LAW JOURNAL

Volume 43

Spring 2013

Number 2

ARTICLES

FROM HERE TO A PENALTY: ANATOMY OF EPA CIVIL ADMINISTRATIVE ENFORCEMENT

Joseph F. Guida & Jean M. Flores 129

OFFSHORE OIL AND GAS: CHARTERING A NEW COURSE IN 2012

Amber L. MacIver 159

NOTES

THE LAST FRONTIER: REGULATING FACTORY FARMS

Reagan M. Marble 175

STRICT LIABILITY IS FOR THE BIRDS: A COMPARISON OF TAKE UNDER THE MBTA AND ESA

Tyson Lies 197

RECENT DEVELOPMENTS

AIR QUALITY – *John B. Turney, Angela Lipscomb* 223

NATURAL RESOURCES – *Aileen M. Hooks, Austin Whitmore* 227

SOLID WASTE – *Ali Abazari, Robin Smith, Kristin Garrett* 232

WATER QUALITY – *Emily Rogers, Merrill Jones* 235

WATER RIGHTS – *Stephanie Trinh* 238

CASENOTES: FEDERAL – *David J. Klein, Erik Combs* 240

CASENOTES: STATE – *Howard Slobodin, Cassandra McCrae* 243

PUBLICATIONS – *Joshua D. Katz, Grant Margeson* 245

WASHINGTON UPDATE – *Laura LaValle, Darrin Wyatt* 250

STATE BAR SECTION NEWS 255

Prepared through The University of Texas School of Law Publications Office

ISSN 0163-545X

Copyright © 2013 Environmental and Natural Resources Section of the State Bar of Texas and
The University of Texas School of Law Texas Environmental Law Journal

Please cite as: TEX. ENVTL. L. J.

TEXAS ENVIRONMENTAL LAW JOURNAL

Volume 43

Spring 2013

Number 2

STATE BAR OF TEXAS

ENVIRONMENTAL AND NATURAL RESOURCES LAW SECTION

P.O. Box 220, Mailstop H-429
Austin, Texas 78767-0220
www.textenrls.org

EDITORIAL BOARD

Editor-In-Chief

Lyn Clancy
P.O. Box 220, Mailstop H-429
Austin, Texas 78767-0220
lynclancytx@gmail.com
(512) 578-3378

Assistant Editor for Production

Tabetha Jaske
P.O. Box 220, Mailstop H-429
Austin, Texas 78767-0220
tabethajaske@gmail.com
(512) 578-2359

Lead Articles Solicitations**Attorney Editor**

Lauren Kalisek
P.O. Box 1725
Austin, Texas 78767-1725
lkalisek@lglawfirm.com
(512) 322-5847

RECENT DEVELOPMENT ATTORNEY CONTRIBUTORS

Air Quality

John B. Turney
816 Congress Ave., Suite 1200
Austin, Texas 78701-2672
jturney@rrsfirm.com
(512) 476-0005

Water Quality & Utilities

Emily Rogers
3711 S. Mopac, Bldg. 1, Suite 300
Austin, Texas 78746
erogers@bickerstaff.com
(512) 472-8021

Casenotes—State

Howard S. Slobodin
P.O. Box 60
Arlington, Texas 76004-0060
slobodinh@trintyra.org
(817) 467-4343

Natural Resources

Aileen M. Hooks
98 San Jacinto Blvd., Suite 1500
Austin, Texas 78701-4078
Aileen.hooks@bakerbotts.com
(512) 322-2616

Water Rights

Robin Smith
P.O. Box 13087
Austin, Texas 78711-3087
rsmith@tceq.state.tx.gov
(512) 239-0463

Publications

Joshua D. Katz
3711 S. Mopac, Bldg. 1, Suite 300
Austin, Texas 78746
jkatz@bickerstaff.com
(512) 472-8021

Solid Waste

Ali Abazari
100 Congress Ave., Suite 1100
Austin, Texas 78701-4042
aabazari@jw.com
(512) 236-2239

Casenotes—Federal

David J. Klein
P.O. Box 1725
Austin, Texas 78767-1725
dklein@lglawfirm.com
(512) 322-5818

Washington Update

Laura LaValle
98 San Jacinto Blvd., Suite 1420
Austin, Texas 78701-4082
llavalle@bdlaw.com
(512) 391-8020

TEXAS ENVIRONMENTAL LAW JOURNAL

Volume 43

Spring 2013

Number 2

UNIVERSITY OF TEXAS SCHOOL OF LAW

TEXAS ENVIRONMENTAL LAW JOURNAL

727 East Dean Keeton St.
Austin, Texas 78705-3224
(512) 471-0299 / telj@law.utexas.edu

STUDENT EDITORIAL BOARD 2012-2013

Editor-in-Chief

Molly Powers

Student Notes Editor

Colleen Lenahan

Recent Developments Editor

Rachel Jones

Lead Articles Editor

Aaron Tucker

Managing Editor

Shelby Gutierrez

Symposium Editor

Hannah Wilchar

STAFF 2012-2013

Steven Alford
Alee Allen
Jon Almanza
Alejandra Avila
Jayanth Balakrishna
Erik Combs
Ben Deninger
Michah Fernandes
Kristin Garrett

Alex Gilbert
Gabby Gonzalez
Monica Hughes
Merrill Jones
Angela Lipscomb
Cassie McCrae
Grant Margeson
Evan Monez
David Munden

Julie Patel
Matt Pierce
Lia Powers
Samia Rogers
Stephanie Trinh
Catherine Wagner
Sarah Wells
Austin Whitmore
Darrin Wyatt

TEXAS ENVIRONMENTAL LAW JOURNAL

Volume 43

Spring 2013

Number 2

STATE BAR OF TEXAS ENVIRONMENTAL AND NATURAL RESOURCES LAW SECTION

EXECUTIVE COMMITTEE OFFICERS (2012-2013)

Chair

Cynthia "Cindy" Bishop
P.O. Box 61994
Dallas, Texas 75261
cbishop@cbishoplaw.com
(214) 893-5646

Vice Chair

Jean Flores
750 N. St. Paul, #200
Dallas, Texas 75201-3236
flores@gsfpc.com
(214) 692-0009

Treasurer

Arnoldo Medina
1400 Smith St., 7th Floor
Houston, Texas 77002
Arnoldo.Medina@chevron.com
(713) 372-9265

Chair Elect

Mike Nasi
100 Congress Ave., #1100
Austin, Texas 78701-4042
mnasi@jw.com
(512) 236-2216

Secretary

Allison Exall
2001 Bryan St., #2050
Dallas, Texas 75201
aexall@cttlegal.com
(214) 270-1410

Immediate Past Chair

Cynthia "Cindy" Smiley
6601 Vaught Ranch Rd., #103
Austin, Texas 78730
cindy@smileylawfirm.com
(512) 394-7121

EXECUTIVE COMMITTEE MEMBERS (2012-2015)

Terms Expire 2013

Tom Bohl
tom.bohl@oag.state.tx.us
(512) 475-4228

Josh Olszewski
olszewski.joshua@epa.gov
(214) 665-2178

Rebecca Koch Skiba
rkskiba@marathonoil.com
(713) 296-2584

Terms Expire 2014

James B. Griffin
james@kbrownpc.com
(210) 299-3704

Steve McMillen
smcmillen@ti.com
(214) 479-1228

Andrew Torrant
atorrant@fulbright.com
(713) 651-5151

Terms Expire 2015

Bane Phillippi
bphillippi@wshllp.com
(512) 652-5785

Susan Maxwell
smaxwell@bickerstaff.com
(512) 472-8021

Amie Dutta Richardson
arichard@tceq.state.texas.gov
(512) 239-2999

COMMITTEE CHAIRS (2012-2013)

Education

David Klein
dklein@lglawfirm.com
(512) 322-5818

Publications

Lyn Clancy
Lyn.Clancy@lcra.org
(512) 578-3378

Law School

Walt Shelton
walt_shelton@baylor.edu
(254) 710-6009

Website & Technology

Constance "Connie" Westfall
connie.westfall@strasburger.com
(214) 651-2351

Finance

Arnoldo Medina
Arnoldo.Medina@chevron.com
(713) 372-9265

Bar Association

Michael Gershon
mgershon@lglawfirm.com
(512) 322-5872

STATEMENT OF PURPOSE

The purpose of the *Texas Environmental Law Journal* is to provide members of the Environmental and Natural Resources Law Section of the State Bar of Texas and the public with legal articles and recent development columns on relevant environmental and natural resources law issues. The *Journal* also provides news of Section activities and other events pertaining to this area of law. The *Journal* is the leading source for articles on Texas environmental and natural resources law.

JOINT PUBLICATION

The *Texas Environmental Law Journal* is an official publication of the Environmental and Natural Resources Law Section of the State Bar of Texas and is published jointly with the University of Texas School of Law's *Texas Environmental Law Journal*. In 1990, the Environmental and Natural Resources Law Section reached an agreement with this student organization at the University of Texas School of Law to co-produce the *Journal* as the *Texas Environmental Law Journal*. The students' involvement began with the summer issue in 1990.

OTHER INFORMATION

The opinions expressed in the *Journal* are solely the opinions of the respective authors and are not the opinions of the School of Law, or the University of Texas School of Law's *Texas Environmental Law Journal*.

To contact the *Journal*, please use the contact information in the preceding pages.

SOLICITATION OF ARTICLES & EDITORIAL POLICIES

The *Journal* solicits articles from authors on environmental and natural resources subjects that will assist Texas environmental and natural resource law practitioners and develop the advancement of environmental and natural resource law.

If you are interested in submitting an article, please contact:

1. Student Lead Articles Editor (telj@law.utexas.edu); or
2. Editor-in-Chief (lynclancytx@gmail.com)

The *Journal* will consider for publication any articles from practitioners, judges, academics, policymakers, and others that are relevant and useful to practitioners in the environmental and natural resources law arena. Manuscripts should be submitted via email to the Solicitations Attorney Editor, Student Lead Articles Editor, or Editor-in-Chief at the addresses shown above.

If the *Journal* accepts a manuscript for publication, the author must provide a copy in electronic format (Microsoft Word) with no pre-defined embedded coding or styles. If a manuscript includes graphics, please provide as separate files, preferably JPEG, PDF, or TIFF files. Graphics should be grayscale and at a resolution of at least 300dpi. The manuscript should be typed and double-spaced, with footnotes. Citations should conform to the most recent editions of *The Bluebook: A Uniform System of Citation* and the *Texas Rules of Form*.

If you desire the *Journal* to return any printed manuscript, please provide a postage prepaid, self-addressed envelope with the manuscript.

COPYRIGHT & PERMISSION TO USE

Unless otherwise provided, the *Journal* grants permission for use of articles, student notes, and recent developments in classrooms, provided that the user: (1) affixes a proper copyright notice to each copy, (2) identifies the author and the source issue of the *Journal*, (3) charges not more than at or below the actual cost of the copies, and (4) notifies the *Journal* of the use.

REPRINTS

The *Journal* has a contract with William S. Hein & Co., Inc. for Hein to provide back issues. Hein has single issues, single volumes, and complete sets available from Vol. 1 (1971) to current at its current fees. These issues are also available electronically through HeinOnline. William S. Hein & Co., Inc.; 1285 Main Street, Buffalo, New York 14209; (716) 882-2600, (800) 828-7571, Fax: (716) 883-8100; mail@wshein.com; www.wshein.com.

SUBSCRIPTIONS & SECTION MEMBERSHIPS

SUBSCRIPTIONS

Subscriptions to the *Journal* are available through:

The University of Texas School of Law Publications
727 East Dean Keeton Street
Austin, Texas 78705-3224
(512) 232-1149
Publications@law.utexas.edu
Order and pay online at: www.texaslawpublications.com

The annual subscription price is \$40.00 domestic / \$50.00 foreign; single issues are \$15.00. Austin residents add 8.25% sales tax, and other Texas residents add 7.25% sales tax.

SECTION MEMBERSHIPS

For attorneys licensed by the State Bar of Texas, membership in the Environmental and Natural Resources Law Section includes an electronic subscription to the *Journal*. To receive hardcopy issues of the *Journal*, please mail Publications@law.utexas.edu or write the Publications Office at the above address stating your Section membership number and your mailing address. Hardcopy requestors will receive only those issues published after your Section membership begins. All subscriptions expire on May 31 unless your annual Section membership is renewed, regardless of the date of initial membership.

To become a member of the Section or to renew your annual membership by May 31 of each year if not renewed when paying your annual State Bar of Texas dues, mail a completed copy of the form on the following page and a check for \$30.00 made payable to "Environmental and Natural Resources Law Section – State Bar of Texas" to:

The State Bar of Texas
Membership Services
P.O. Box 12487
Austin, Texas 78711-2487

And, mail a copy to Lyn Clancy, ENRLS, P.O. Box 220, Mailstop H-429, Austin, Texas 78767-0220.

Please call Membership Services ((800) 204-2222 or (512) 427-1463), the Publications Office (512) 232-1149), the Treasurer, or the Editor-in-Chief, if you have any questions.

TEXAS ENVIRONMENTAL LAW JOURNAL

Name	
Firm, Business, or Agency	
E-mail Address (required to receive Greenwire Newservice and e-Newsletters)	
Mailing Address	
Hard Copy Desired	
Telephone/Fax Numbers	
State Bar Number	

A version of this form is also available on the Section's website at: www.tenrls.org/howtojoin.html.

LETTER FROM THE EDITORS

Dear Readers,

In this issue's first Lead Article, "From Here to a Penalty: Anatomy of EPA Civil Administrative Enforcement," **Joseph F. Guida & Jean M. Flores** provide an overview of the basic elements of EPA's current civil administrative enforcement program. The article also discusses strategies for resolving conflicts and avoiding full-blown enforcement and litigation, including negotiated settlements, negotiated consent orders, penalty avoidance, and penalty mitigation. Mr. Guida and Ms. Flores conclude by identifying some positive and negative terms and conditions in settlements from the defense perspective.

Amber L. MacIver explores the rapidly changing environmental regulations related to the oil and gas industry in the second Lead Article, "Offshore Oil and Gas: Chartering a New Course in 2012." The article addresses liability for releases and regulatory changes by summarizing new rules and guidance issued over the last two years, many of which were prompted by the Macando Incident.

In the first of two Student Notes, "The Last Frontier: Regulating Factory Farms," **Reagan M. Marble** suggests that the theory of reflexive law can be applied to solve the outdated and ineffective regulations concerning concentrated animal feeding operations (CAFOs). After first providing an overview of CAFOs and the impact that the waste produced has on water and air quality, the note guides the reader through the current regulatory scheme and its pitfalls. The author proposes a solution – namely encouraging CAFO owners to participate in reflexive policy and to create market-based incentives to reduce pollution.

Differences between the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act (ESA) are the focus of our second Student Note, "Strict Liability is for the Birds: A Comparison of Take Under the MBTA and ESA." Author **Tyson Lies** provides a detailed comparison of the 'take' provisions under the two acts and recommends steps to enhance the effectiveness and resolve what he concludes is an unpredictable regulatory scheme under the MBTA. The note compares the breadth and clarity of each act's take provisions as well as the Habitat Conservation Plan (HCP) process under the ESA and USFWS's Final Land-Based Wind Energy Guidelines under the MBTA. Applying these different laws to an example, Mr. Lies argues that uncertainty over take in the MBTA hampers development and conservation interests.

Lyn Clancy
Editor-in-Chief

Molly L. Powers
Student Editor-in-Chief

Aaron Tucker
Lead Articles Editor

Colleen Lenahan
Student Notes Editor

Rachael K. Jones
Recent Developments Editor

Shelby Gutierrez
Managing Editor

Hannah Wilchar
Symposium Editor

FROM HERE TO A PENALTY: ANATOMY OF EPA CIVIL ADMINISTRATIVE ENFORCEMENT¹

BY JOSEPH F. GUIDA & JEAN M. FLORES²

I.	Introduction/Preliminary Matters	130
	A. Purpose	131
	B. Limitations	131
II.	Overview of Statutory Authority for EPA Administrative Penalty Enforcement	133
	A. Statutory Penalties Generally	133
	B. Administrative Penalty Authority	134
III.	Enforcement Entry Points	134
	A. Inspections	134
	1. Statutory Authorities	134
	2. A Few Words about Warrantless EPA Searches	135
	3. Other Authorities	136
	4. Numerous Types of Agency Inspections	136
	5. Agency Inspection Guidance/Protocols	137
	6. Company Inspection Policies and Protocols	137
	B. Information Requests	138
	1. Statutory Authority for Information Requests	138
	2. Responding to Information Requests	138
	C. Self-Disclosures	139
	D. Whistleblowers and Other Parties	142
IV.	Enforcement Process and Exit Points	142
	A. Referral to U.S. Department of Justice	142
	B. Administrative Litigation	143
	1. Complaint and Answer	143
	2. Contents of Answer	143
	3. Preliminary Settlement Discussions	144

1 Disclaimer: The information provided in this presentation is intended solely as an educational resource, does not constitute legal advice, and should not be used as a substitute for careful review of the rulemaking and enforcement actions themselves and consultation with competent legal and technical professionals as to site-specific circumstances. The views expressed in this paper are solely those of the authors and should not be construed as representative of the views of any other person or entity.

2 The authors are partners with the Dallas law firm of Guida, Slavich & Flores, P.C. Although the authors take sole responsibility for any errors, they would like to acknowledge gratefully the contributions of their fellow shareholder, Michael R. Goldman, in the preparation of this article, as well as the assistance of firm shareholders Carrick Brooke-Davidson and Paul Seals.

4. Assignment of Administrative Law Judge	144
5. Alternative Dispute Resolution	144
6. Pre-hearing Exchange, Discovery, and Motions	144
7. The Hearing	145
8. The Final Decision	145
9. Appeal Right	145
C. Settlement By Consent Agreement and Final Order	146
1. The Basics	146
2. Penalty Negotiation/Penalty Policies	146
a. <i>Types of Penalty Policies</i>	146
b. <i>Penalty Components</i>	148
c. <i>Economic Benefit Component</i>	148
d. <i>Supplemental Environmental Projects</i>	149
(1) Legal Requirements for SEPs	149
(2) Approved Categories of SEPs	149
e. <i>Stipulated Penalties</i>	150
3. Injunctive Relief	151
4. Settlement Terms (Helpful and Unhelpful Terms and Conditions)	151
V. Conclusion	154
Attachment 1: Review of Selected Major Federal Environmental Statutes Administrative Penalty Authorities	155

On one typically ordinary day, you are casually opening the morning mail and find a letter on U.S. Environmental Protection Agency (EPA) letterhead (with that distinctive logo) signed by some kind of “division director.” Attached to the letter is a legal-looking document with the word “Complaint” emblazoned prominently across the first page. The sunlit room suddenly seems to go dim around you and you start to feel your ears getting warm and your stomach tightening, especially when you get to the part with the heading “Civil Penalty.” It quickly sinks in that you are about to embark on a potentially long and nerve-racking odyssey: Yes. . . *It’s time for “from here to a penalty!”*³

I. INTRODUCTION/PRELIMINARY MATTERS

EPA enforcement activity, including administrative penalty orders, has been relatively steady in the last few years, although in 2010, EPA posted a slight decline in some

3 Any similarity between the name of this paper and the celebrated motion picture that won the Oscar for “Best Picture” in 1953 is purely intentional. That connection, however, is the only one that our imaginations and copyright laws have allowed us to make in this paper (except at the very end). We sincerely regret any disappointment that we may cause.

of its statistics.⁴ Although new budget cuts may take a bite out of EPA's enforcement initiatives,⁵ enforcement is expected to remain an agency priority.⁶

A. PURPOSE

The purpose of this article is to:

1. Provide a simplified and conversational overview of the basic elements of EPA's current civil administrative enforcement⁷ program that are common to the major federal pollution control statutes (*i.e.*, air, water, and waste), including inspections, information requests, self-disclosures, administrative complaints, and compliance/penalty orders;
2. Discuss strategies for resolving conflict short of hearing/litigation, including negotiated settlements/consent orders and penalty avoidance/mitigation; and
3. Identify some positive and negative terms and conditions in settlements from the defense perspective.

The ultimate objective of the article is to provide the reader with a very basic, practical overview of EPA's administrative penalty enforcement process from a systemic perspective. Since the regulated community will see administrative enforcement far more often than judicial enforcement, this is an important area with which to be familiar.

B. LIMITATIONS

We want to emphasize that this is a basic and selected overview of the administrative penalty assessment process. The EPA administrative enforcement process has a great

4 U.S. ENVTL. PROT. AGENCY, NATIONAL ENFORCEMENT TRENDS (NETS) REPORT § C, at 1–3b (2012), <http://www.epa.gov/oecaerth/resources/reports/nets/nets.pdf>.

5 See Joel Mintz, *Cutting EPA's Enforcement Budget: What It Might Mean*, CENTER FOR PROGRESSIVE REFORM (Apr. 12, 2012), <http://www.progressivereform.org/CPRBlog.cfm?idBlog=A6A2E941-98B3-8007-9CEE42458BED78E>.

6 See *National Enforcement Initiatives*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/compliance/data/planning/initiatives/index.html> (last updated Jan. 16, 2013).

7 As used in this paper, the term “administrative enforcement” refers to civil enforcement actions seeking the imposition of civil penalties that are prosecuted by and within the agency as opposed to “judicial enforcement” actions, which are prosecuted on behalf of the agency in a federal court. *Enforcement Basic Information*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/enforcement/basics.html> (last updated Jan. 3, 2013). In the “judicial” type of action, EPA is represented by the U.S. Department of Justice before a federal judge or magistrate and enforcement can be for either civil or criminal purposes. *Id.* In the “administrative” type of action, the agency is represented by its own attorneys before a neutral judicial officer appointed (and technically employed) by the agency, and the actions are exclusively civil. *Id.*; *Environmental Appeals Board*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/aboutepa/eab.html> (last updated Dec. 10, 2012). “Civil” actions exclusively entail the potential imposition of monetary penalties and affirmative compliance and remedial obligations (obligations typically referred to by attorneys as “injunctive relief.”) *Enforcement Basic Information*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/enforcement/basics.html> (last updated Jan. 3, 2013). “Criminal” actions potentially involve imprisonment in addition to criminal monetary penalties and affirmative compliance obligations. *Id.*

many legal nooks and crannies that will not be covered here.⁸ So, the simplified discussion here should not be understood to imply that the system is simple from a legal standpoint. In many ways, it can frequently mirror the arcane detail the public is used to seeing in the judicial system. Accordingly, it is always prudent to promptly consult with competent legal counsel when faced with a formal enforcement action.

This article also will not focus on administrative compliance orders that do not assess civil penalties, such as those issued pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §106 (abatement of imminent and substantial endangerment from release of hazardous substances), the Resource Conservation and Recovery Act (RCRA) §7003 (abatement of imminent and substantial endangerment from release of solid or hazardous waste), RCRA §3013 (monitoring, analysis, and testing related to substantial hazard), Clean Air Act §303 (abatement of imminent and substantial endangerment from pollution source), Clean Water Act §309(a) (abatement of permit violations), or Safe Drinking Water Act §300i(a) (abatement of imminent and substantial endangerment to drinking water supply).⁹

Finally, we note that most of the primary federal environmental pollution control programs are delegated to, or administered by, state agencies¹⁰ and, consequently, a major portion of administrative enforcement of these programs is frequently conducted under state law and administrative procedures rather than directly by EPA. Although there are wide variations in the nature of boards and commissions that conduct administrative enforcement at the state or regional level, state administrative enforcement is generally very similar in substance and procedure to EPA administrative enforcement. Consequently, many of the observations made in this paper will have relevance at the state level as well (i.e. settlement terms, SEPs, contested cases). Of course, some federal programs, e.g. regulation of fuels and fuel additives, 40 C.F.R Parts 79 & 80, are enforced only at the federal level.

8 For more detailed legal discussions of EPA's administrative enforcement process, see, e.g., Joseph J. Lisa, *EPA Administrative Enforcement Actions: An Introduction to the Consolidated Rules of Practice*, 24 TEMP. J. OF SCI. TECH. & ENVTL. L. 1 (2005); OFFICE OF ADMIN. LAW JUDGES, U.S. ENVTL. PROT. AGENCY, PRACTICE MANUAL (2011), available at <http://www.epa.gov/oalj/orders/alj-practice-manual.pdf> [hereinafter ADMIN. LAW JUDGES PRACTICE MANUAL].

9 It should be noted that on March 21, 2012, a unanimous Supreme Court in *Sackett v. EPA*, 132 S. Ct. 1367 (2012), held that administrative consent orders issued under the Clean Water Act constitute final agency action. Accordingly, under the Administrative Procedure Act, respondents are now afforded pre-enforcement review of the factual and legal basis of administrative consent orders and may bring a civil action to challenge them. The Court's holding might also apply to enforcement orders issued under the Clean Air Act and RCRA, which also do not expressly bar judicial pre-enforcement review. Since the court did not discuss the due process concerns in precluding judicial review of compliance orders, whether CERCLA's preclusion on pre-enforcement review is constitutional remains to be determined.

10 See *Delegation by Environmental Act*, ENVTL. COUNCIL OF THE STATES, http://www.ecos.org/section/states/enviro_actlist (last updated Nov. 2012) ("96 Percent of Programs Delegated to the States").

II. OVERVIEW OF STATUTORY AUTHORITY FOR EPA ADMINISTRATIVE PENALTY ENFORCEMENT

We do not mean to suggest by the title of the article that civil penalties are always a foregone conclusion in the administrative enforcement process. However, in our experience, the imposition of penalties and other affirmative obligations on the regulated entity are certainly EPA's expected conclusion and full penalty avoidance, when it happens, is usually not achievable without litigation (administrative or judicial) with the agency.

Long experience tells us that the best time for full penalty avoidance in the administrative realm without litigation is before a complaint gets issued, especially where the possibility of enforcement is known, *e.g.*, following an information request or inspection. We often find that the time between an inspection and issuance of an administrative complaint can be used to meet with the agency and provide reasons why an enforcement action should not be instituted. After complaint issuance, it can be exceedingly difficult for the involved agency personnel to concede that the claims on which enforcement was initiated lacked merit.

A. STATUTORY PENALTIES GENERALLY

All of the major federal environmental statutes contain penalty provisions establishing the maximum penalties that may be sought by the United States for violations of these acts.¹¹ EPA is the federal agency that primarily administers the federal environmental statutes and is given the authority to take enforcement actions, including filing administrative complaints, issuing administrative enforcement orders, and seeking and collecting penalties under the federal environmental statutes through administrative, *i.e.* non-judicial, enforcement actions. Certain environmental statutes, such as the Clean Air Act and the Clean Water Act, contain penalty "caps" limiting the amount of penalty dollars that EPA may seek administratively.¹² Generally, in these situations, if EPA seeks an amount in excess of a penalty cap, EPA must refer the case to the U.S. Department of Justice (DOJ) for a civil suit (subject to certain exceptions).¹³

One other significant, introductory note about federal statutory penalties: periodically, the stated maximum penalty is increased pursuant to the Federal Civil Penalties Inflation Adjustment Act as amended by the Debt Collection Improvement Act of 1996.¹⁴ EPA implements these adjustments by rules set forth in 40 C.F.R. pt. 19.¹⁵ The maximum statutory penalty that applies to any particular violation depends on the date

11 See, *e.g.*, Federal Water Pollution Control (Clean Water) Act §§ 309(g)(2), 311(b)(6)(B), 33 U.S.C. §§ 1319(g)(2), 1321(b)(6)(B) (2012); Clean Air Act § 113(d), 42 U.S.C. § 7413(d) (2012); Resource Conservation and Recovery Act (RCRA) §§ 3008(a)(3), (c), (g), (h)(2), 42 U.S.C. §§ 6928(a)(3), (c), (g), (h)(2) (2012); Toxic Substances Control Act (TSCA) § 16, 15 U.S.C. § 2615 (2012).

12 See, *e.g.*, 42 U.S.C. § 7413(d)(1); 33 U.S.C. § 1319(g)(2).

13 See, *e.g.*, 42 U.S.C. § 7413(d).

14 See Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 (2012), amended by Debt Collection Improvement Act of 1996, 31 U.S.C. § 3701 (2012).

15 *Id.*; 40 C.F.R. pt. 19 (2012).

of the violation and the amount of the penalty at that time.¹⁶ The most recent adjustment was implemented by the 2008 Civil Monetary Penalty Inflation Adjustment Rule.¹⁷ The penalty amounts that are discussed in this paper reflect the amounts in that rule.

B. ADMINISTRATIVE PENALTY AUTHORITY

Because this paper focuses on the EPA administrative process (and also only on civil, not criminal scenarios), included as Attachment 1 is a summary of some of the major federal statutes to illustrate, in greater detail, EPA's authority to assess and collect civil penalties without the filing of a lawsuit. We refer to this authority as "administrative penalty authority."

Although Attachment 1 discusses the maximum penalties allowed by law, the maximum penalty is not necessarily EPA's starting point, as we will discuss below in the section concerning EPA's penalty policies. Moreover, the final penalty is also subject to negotiation in a settlement context, as discussed below in the section concerning settlement negotiation.

III. ENFORCEMENT ENTRY POINTS

Of course, before any enforcement action begins, EPA must learn or discover that a violation or potential violation has occurred (or is occurring). How does such information get to EPA? There are a number of ways that EPA can gather or receive facts that would lead EPA to use one or more of the enforcement tools in its arsenal. The primary ones are discussed below.

A. INSPECTIONS

EPA inspections are very often a precursor to enforcement. Below we examine the sources of EPA's inspection authority, some of the different types of inspections and EPA's guidance on inspection protocols, and company protocols for handling inspections.

1. STATUTORY AUTHORITIES

The major federal environmental statutes provide EPA with very broad authority to inspect regulated facilities.¹⁸ These statutes vary on precisely what inspection authority EPA is granted. For example, the Toxic Substances Control Act (TSCA) requires a written notice with specified information while other statutes do not require any notice

16 40 C.F.R. §§ 19.2, 19.4.

17 Civil Monetary Penalty Inflation Adjustment Rule, 73 Fed. Reg. 75,340-46 (Dec. 11, 2008); 40 C.F.R. pts. 19, 27 (2012).

18 See, e.g., Clean Water Act § 307(a)(B), 33 U.S.C. § 1318(a)(B) (2012); Clean Air Act § 114(a)(2), 42 U.S.C. § 7414(a)(2) (2012); RCRA, § 3007(a), 42 U.S.C. § 6927(a) (2012); *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) § 104(e), 42 U.S.C. § 9604(e) (2012); TSCA § 2, 15 U.S.C. § 2601(a) (2012).

at all.¹⁹ Agency inspectors can appear with or without a court-issued search warrant.²⁰ In connection with civil enforcement, warrantless searches are the norm.²¹

2. A FEW WORDS ABOUT WARRANTLESS EPA SEARCHES

The Fourth Amendment to the U.S. Constitution protects citizens' privacy from unreasonable searches and seizures that are unsupported by a warrant based on probable cause.²² If evidence is seized in violation of the Fourth Amendment, it is potentially inadmissible against a defendant at trial.²³ As a general rule, a warrantless inspection of a private dwelling without proper consent is unconstitutional.²⁴ The U.S. Supreme Court extended this general rule to protect business owners and operators because they also have an expectation of privacy against unreasonable administrative searches of their commercial property.²⁵ However, the rule is not absolute and the U.S. Supreme Court has created numerous exceptions to the search warrant requirement.²⁶ In addition, as indicated above, many environmental statutes provide for warrantless administrative searches and courts have been generally unwilling to find these statutes unconstitutional.²⁷

With respect to the regulated community, the exception that is most often applied is the "pervasively regulated business" exception.²⁸ The exception is also sometimes referred to as the "longstanding governmental regulation" exception. It provides that a warrantless inspection of a pervasively regulated business is reasonable when: (i) the underlying regulatory scheme is supported by a "substantial government interest"; (ii) the warrantless administrative search is "necessary to further the regulatory scheme"; and (iii) the scheme provides "a constitutionally adequate substitute for a warrant."²⁹

19 See, e.g., Clean Water Act § 307(a)(B), 33 U.S.C. § 1318(a)(B) (2012); Clean Air Act § 114(a)(2), 42 U.S.C. § 7414(a)(2) (2012); RCRA, § 3007(a), 42 U.S.C. § 6927(a) (2012); CERCLA § 104(e), 42 U.S.C. § 9604(e) (2012); TSCA § 2, 15 U.S.C. § 2601(a) (2012).

20 Criminal inspections, which are beyond the scope of this paper, are typically executed pursuant to a search warrant in an aggressive and coercive manner leaving little opportunity for consultation with the facility personnel.

21 See, e.g., *Dow Chem. Co. v. United States*, 476 U.S. 227, 228 (1986); *Reeves Bros., Inc. v. U.S. Evtl. Prot. Agency*, 956 F.Supp. 665, 674 (W.D. Va. 1995).

22 U.S. CONST. amend. IV.

23 *Silverthorne Lumber Co. v. United States*, 251 U.S. 385, 392 (1920) (court must exclude illegally seized evidence).

24 *Camara v. Municipal Court*, 387 U.S. 523, 528–29 (1967).

25 See *Marshall v. Barlow's, Inc.*, 436 U.S. 307, 322–24 (1978).

26 *Flippo v. West Virginia*, 528 U.S. 11, 13 (1999) (per curiam); *Katz v. United States*, 389 U.S. 347, 357 (1967).

27 *In re Mullins & Pritchard, Inc.*, 549 So.2d 872, 876 (La.App. 1 Cir. 1989) (citing *New York v. Burger*, 482 U.S. 691 (1987)).

28 See *Burger*, 482 U.S. at 701.

29 *Burger*, 482 U.S. at 702–03 (internal quotation marks omitted). Another interesting exception to the requirement for a search warrant is known as the "open fields" doctrine. See *Oliver v. United States*, 46 U.S. 170, 179–181 (1984). There is no warrant requirement in these situations because there is no "search" within the meaning of the Fourth Amendment. *Id.* No justifiable expectation of privacy is present when the incriminating evidence

In view of the preceding case law, EPA enforcement staff generally takes the position that any refusal to grant access for a warrantless inspection constitutes a violation of the relevant statute.³⁰ As a practical matter, however, pursuing such a claim would take the agency longer to achieve than simply getting a search warrant or issuing a compliance order for access. Therefore, absent extraordinary circumstances, most respondents acquiesce to a requested inspection to avoid compelled entry by EPA. Acquiescence, however, is not necessarily the same as consent and facility personnel need to remain mindful that inspectors can expand the legally-justifiable scope of an inspection by securing the consent of facility personnel to expand the inspection beyond the matters on which it was originally based.³¹

3. OTHER AUTHORITIES

Other sources of EPA inspection authority can be found in documents such as:

- Judicial consent decrees;
- Administrative compliance orders (unilateral or consent); and
- Facility permits.

These sources of inspection authority frequently will have provisions granting EPA and state agencies the authority to gain access and inspect records. Refusals to permit access can lead to allegations of violation under these authorities as well. In the case of administrative consent orders, a refusal to grant access can lead to imposition of stipulated penalties. In the case of judicial decrees, refusals to grant access can even lead to contempt of court actions.

4. NUMEROUS TYPES OF AGENCY INSPECTIONS

There are numerous types of inspections that EPA can conduct under the statutory authorities, any of which could lead to information that could be the subject of an EPA administrative enforcement action. The following are some examples:

- Under RCRA, EPA regularly conducts Compliance Evaluation Inspections (CEI). A CEI is an on-site evaluation of a hazardous waste handler's compliance with RCRA regulations and permit standards. The purpose of the CEI is to gather information necessary to determine compliance and support enforcement actions. The inspection may include: (i) a characterization of the handler's activities; (ii) identification of the types of hazardous wastes managed on-site; (iii) a record review of reports; (iv) documents, and on-site plans; and (v) the identification of any units that generate, treat, store, or dispose of hazardous waste.³²

or activities are readily observable by persons on adjacent lands. *Id.* The importance of this doctrine to EPA's right to conduct inspections is substantial given that regulated environmental activities commonly occur in readily observable places.

30 See, e.g., *Boliden Metech, Inc., v. United States*, 695 F.Supp. 77, 78–80 (D.R.I. 1988) (describing the plaintiff's complaint challenging the EPA's authority to execute a warrantless inspection and the EPA's motion to dismiss in response).

31 See *In re Bunker Hill Mining & Smelter Complex*, 728 F. Supp. 626, 628–29 (D. Idaho 1990) (holding that the administrative warrant in the case was "analogous to an administrative subpoena" under which the company under investigation, rather than the EPA, is responsible for producing materials responsive to the warrant).

32 U.S. ENVTL. PROT. AGENCY, EC-G-1999-001, REVISED RCRA INSPECTION MANUAL, at 1-8 to 1-9 (1998).

- Under RCRA, EPA may also conduct a “Compliance Sampling Inspection” where samples are gathered in conjunction with a CEI, or separately.³³
- Other types of RCRA inspections are Comprehensive Groundwater Monitoring Evaluations, Case Development Inspections, and Operations and Maintenance Inspections.³⁴
- Under the Clean Air Act, EPA may conduct Clean Air Act Evaluations, either full or partial.³⁵
- Under the Clean Water Act, EPA may perform, among other types of inspections, compliance evaluation inspections, compliance sampling, and performance audits.³⁶
- EPA’s National Enforcement Investigations Center (NEIC) performs multi-media inspections cutting across the spectrum of pollution control statutes.³⁷

5. AGENCY INSPECTION GUIDANCE/PROTOCOLS

EPA has published guidance and manuals to outline the procedures and policies it will (or may) follow in an inspection. For example, see:

- NPDES Compliance Inspection Manual;³⁸
- 3007 - Inspection Authority Under RCRA;³⁹
- Guidance for Conducting Risk Management Program Inspections Under Clean Air Act Section 122(r);⁴⁰
- EPA’s “Inspections and Evaluations” webpage;⁴¹
- Multi-Media Investigation Manual;⁴² and
- Process-Based Investigation Guide.⁴³

6. COMPANY INSPECTION POLICIES AND PROTOCOLS

Many companies have well-developed policies and protocols for handling regulatory inspections. Having such policies and protocols in place can facilitate and expedite co-

33 *Id.* at 1-9.

34 *Id.*

35 *Inspections and Evaluations*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/compliance/monitoring/inspections/index.html> (last updated June 13, 2012).

36 U.S. ENVTL. PROT. AGENCY, EPA 305-X-04-001, NPDES COMPLIANCE INSPECTION MANUAL, at 9-1, 9-17 (2004).

37 *See NEIC Laboratory Science*, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/oecaerth/neic/center/partnerships/state_local_partner.html (last updated Oct. 24, 2012).

38 U.S. ENVTL. PROT. AGENCY, EPA 305-X-04-001, NPDES COMPLIANCE INSPECTION MANUAL (2004).

39 OFFICE OF SOLID WASTE & EMERGENCY RESPONSE, U.S. ENVTL. PROT. AGENCY, OSWER9938, 3007 - INSPECTION AUTHORITY UNDER RCRA (1986).

40 U.S. ENVTL. PROT. AGENCY, EPA 550-K-11-001, GUIDANCE FOR CONDUCTING RISK MANAGEMENT PROGRAM INSPECTIONS UNDER CLEAN AIR ACT SECTION 122(r) (2011).

41 *Inspections and Evaluations*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/compliance/monitoring/inspections> (last updated June 14, 2012).

42 OFFICE OF ENFORCEMENT & COMPLIANCE ASSURANCE, U.S. ENVTL. PROT. AGENCY, EPA-330/9-89-003-R, MULTI-MEDIA INVESTIGATION MANUAL (1992).

43 OFFICE OF ENFORCEMENT & COMPLIANCE ASSURANCE, U.S. ENVTL. PROT. AGENCY, EPA-330/9-97-001, PROCESS-BASED INVESTIGATION GUIDE (1997).

operation with the agency and afford the company with a predictable framework in which to protect its rights. These policies and protocols vary but typically there are common potential elements. Keep in mind, however, that no set of protocols can be expected to cover the full range of inspection scenarios. There is no “one size fits all” approach. Consequently, care should be taken to apply them in a way that is appropriate in a given situation. Moreover, when delaying commencement of an inspection, or any phase of an inspection, to follow relevant protocols, care should be taken to avoid making any delay substantial enough to amount to a refusal of access, unless authorized personnel have determined that such delay is warranted under the circumstances.

B. INFORMATION REQUESTS

Another common tool EPA uses to gather information that can become the basis for an administrative enforcement action is an information request. Below we briefly identify the sources of information request authority, and provide a note about company responses to the same.

1. STATUTORY AUTHORITY FOR INFORMATION REQUESTS

The following statutory provisions (among others) provide EPA with authority to request information from regulated entities:⁴⁴

- Section 114(a) of the Clean Air Act, 42 U.S.C. § 7414(a);
- Section 308(a) of the Clean Water Act, 33 U.S.C. § 1318(a);
- Sections 8(a), 11(a), and 11(b) of the Toxic Substances Control Act, 15 U.S.C. §§ 2607(a), 2610(a), (b);
- Section 3007(a) and 9005(a) of the Resource Conservation and Recovery Act, U.S.C. §§ 6927(a), 6991(a);
- Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604(e); and
- Sections 1445(a) and (b) of the Safe Drinking Water Act, 42 U.S.C. § 300j-4(a) and (b).

2. RESPONDING TO INFORMATION REQUESTS

Court cases regarding the scope of EPA’s powers to request information, and the nature of a respondent company’s rights to object to such requests has historically been limited.⁴⁵ Unfortunately, the scope of EPA’s information gathering authority under environmental statutes does not have the same definition as that imposed under judicial rules of procedure regarding discovery in civil cases.⁴⁶ It seems justified to expect that EPA’s powers to obtain information under its statutory authorities should have some reasonable

44 Although seen less frequently, environmental statutes also grant EPA with power to issue administrative subpoenas. *See, e.g.*, TSCA § 11(c), 15 U.S.C. § 2610(c) (2012); CERCLA § 122(e)(3)(B), 42 U.S.C. § 9622(e)(3)(B) (2012).

45 *See, e.g.*, *United States v. Charles George Trucking Co.*, 823 F.2d 685, 690–91 (1st Cir. 1987); *United States v. Crown Roll Leaf Inc.*, 29 ENVTL. L. REP. 20262 (D.N.J. 1989).

46 *See Charles George Trucking Co.*, 823 F.2d at 686 (citing the portions on the relevant environmental statutes giving the EPA information-gathering authority).

parameters and that such parameters should bear at least some similarity to the nature and scope of information than can be obtained in judicial proceedings.⁴⁷

Accordingly, in consultation with legal counsel, respondents will want to consider objecting to such requests when, for example, they are overly burdensome or oppressive, vague or ambiguous, seek legally-privileged information, or do not allow adequate time for response. Bottom line: Do not assume that there are no possible defenses or objections to a given information request. In addition, it also is important to provide qualifications to any response. EPA's requests sometimes seek a very broad and ill-defined universe of documents and data going back years that would be impossible for a respondent to satisfy with certainty.

In addition, respondents should always consider the need for, and promptly request from EPA, additional time to respond where an information request is voluminous or the respondent has other pressing obligations (such as a turnaround) that may delay a response.

Notwithstanding the preceding strategies, keep in mind that EPA has the authority to seek penalties for deficiencies or refusal to provide information, and thus take seriously any EPA information requests.⁴⁸ For instance, in one case a court upheld \$1,908,000 in civil penalties against the president of a refinery for failure to timely and adequately respond to information requests under CERCLA.⁴⁹

C. SELF-DISCLOSURES

Another way EPA may learn of a violation is when a party voluntarily contacts the agency to disclose an apparent non-compliance at a facility. Upon becoming aware of a non-compliance, one of the first questions a company and its legal counsel should ask (after "Is there an immediate reporting or notification requirement?") is "Would there be any benefit in self-disclosing the issue to EPA?" EPA has developed a significant incentive for self-evaluation and voluntary reporting—penalty forgiveness.⁵⁰

Under EPA's "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations," (the Audit Policy), EPA will not seek gravity-based penalties against a party who has met all nine conditions set forth in the policy.⁵¹ EPA retains discretion to collect any economic benefit that may have been realized as a result of

47 See, e.g., *id.* at 691 (discussing case law in other civil contexts in addressing EPA's information-gathering authority).

48 See, e.g., *id.* at 686.

49 *United States v. Gurley*, 235 F. Supp. 2d 797, 800–01, 808 (W.D. Tenn. 2002), *aff'd*, 384 F.3d 316 (6th Cir. 2004). In that case, the court considered the following factors in assessing whether the penalty was appropriate: "1) the good or bad faith of the defendant; 2) the injury to the public; 3) the defendant's ability to pay; 4) the desire to eliminate the benefits derived by a violation; and 5) the necessity of vindicating the authority of the agency in question." *Id.* at 806. On balance, the court reasoned that the assessment was appropriate based largely on the president's bad faith refusal to respond at all to such requests even though the requests sought information that the EPA had already obtained from other sources. *Id.*

50 *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 65 Fed. Reg. 19,618 (Apr. 11, 2001).

51 *Id.* at 19,625–28.

noncompliance.⁵² The distinction between gravity-based penalties and economic benefit are discussed in Section III.B.1 below.

The nine conditions for mitigation of 100 percent of a gravity-based penalty under the Audit Policy are:⁵³

- 1) Systematic discovery of the violation through an environmental audit or the implementation of a compliance management system.⁵⁴ The Audit Policy requires that, to satisfy the first condition, the non-compliance be discovered through an environmental audit or through an objective, systematic, documented procedure or practice reflecting the company's "due diligence" in preventing, detecting, and correcting violations.⁵⁵ The Audit Policy defines "Compliance Management System" and the due diligence required.⁵⁶ Generally it means systematic efforts to prevent, detect and correct violations through, for example, policies and procedures, assignment of responsibility, mechanisms for evaluating how well the policies and procedures work and modifying them when appropriate, communication of policies and procedures to employees and incentives to comply.⁵⁷ The company bears the burden to demonstrate how this has been accomplished.⁵⁸ Often violations are discovered through means other than an audit or other process that would qualify as systematic under the Audit Policy. To encourage self-reporting even under such circumstances, the Audit Policy can still be used to gain up to 75 percent mitigation of gravity-based penalties even if this first condition is not met.⁵⁹ However, all other conditions must be met.⁶⁰
- 2) Voluntary discovery.⁶¹ This means the violation was not detected as a result of a legally-required monitoring, sampling or auditing procedure.⁶²
- 3) Prompt disclosure in writing to EPA within 21 days of discovery.⁶³ Discovery occurs "when any officer, director, employee or agent of the facility has an objectively reasonable basis for believing that a violation has, or may have, occurred."⁶⁴
- 4) Independent discovery and disclosure before EPA or another regulator would likely have identified the violation through its own investigation or based on information provided by a third party.⁶⁵

52 *Id.* at 19,626.

53 *Id.* at 19,625–26.

54 *Id.* at 19,625.

55 *Id.*

56 *Id.*

57 *Id.*

58 *See id.*

59 *Id.*

60 *Id.*

61 *Id.*

62 *Id.*

63 *Id.* at 19,626.

64 *Id.*

65 *Id.*

- 5) Correction and, if necessary, remediation, must be completed within 60 calendar days from the date of discovery.⁶⁶ The Audit Policy normally requires a certification in writing that the violation was corrected within 60 days of discovery of the violation.⁶⁷ However, EPA guidance acknowledges that there are circumstances when correction is not possible and, in those circumstances, the violator must adopt specific and appropriate measures to prevent recurrence and take any other steps necessary to address the violation.⁶⁸
- 6) Prevent recurrence of the violation.⁶⁹
- 7) Repeat violations are ineligible.⁷⁰ The specific (or closely related) violations cannot have occurred at the same facility within the past three years, or “as part of a pattern at multiple facilities owned or operated by the same entity” within the past five years.⁷¹ For a “violation” to have occurred for this purpose, EPA guidance states that EPA or a third party must have given the violator “notice” of a violation, such as through notices of violation, warning letters, complaints, consent orders, transmittal of an inspection report noting violations, citizen suits, and receipt of penalty mitigation.⁷²
- 8) The violation cannot result in “serious actual harm,” present an “imminent and substantial endangerment,” or “violate[] the specific terms of any judicial or administrative order, or consent agreement.”⁷³
- 9) The disclosing entity must cooperate with EPA.⁷⁴

Even if a self-disclosure does not meet the conditions of the Audit Policy, it might still be warranted depending upon the circumstances. Some of EPA’s policies concerning calculation of penalties allow (or result in) penalty reductions if a party has demonstrated good-faith and cooperation through a voluntary disclosure.⁷⁵ The decision often hinges on factors such as the magnitude of the discovered violation, the steps necessary to correct the violation, and the likelihood that the violation would be apparent to EPA in the future through inspections, document review, etc. For example, sometimes a party will determine that a small, easily corrected deviation does not rise to the level of non-compliance that would make self-disclosure incrementally more beneficial than simply correcting the issue.

One limiting factor on self-disclosures to EPA either under the Audit Policy or otherwise is that the benefits of the disclosure will only be available when EPA has primary jurisdiction over the violation. Note, however, that EPA can still enforce even when a

66 *Id.* at 19,622.

67 *Id.* at 19,626.

68 *Id.*

69 *Id.*

70 *Id.*

71 *Id.*

72 *Id.* at 19,622–23.

73 *Id.* at 19,626.

74 *Id.*

75 See e.g., Memorandum from John Peter Suarez, Assistant Adm’r, U.S. Evtl. Prot. Agency, to Reg’l Counsel, 1–10 et al. 35 (June 23, 2003), <http://www.epa.gov/Compliance/resources/policies/civil/rcra/rcpp2003-fnl.pdf>.

program has been delegated to a state.⁷⁶ For example, a hazardous waste program violation at a Texas facility would be within the jurisdiction of the Texas Commission on Environmental Quality (TCEQ).⁷⁷ Any penalty associated with that violation likely would come from the TCEQ, so a self-disclosure, if any, would be more appropriately made to the TCEQ. However, there are significant, relevant regulatory programs applicable to refiners, such as the fuels standards and Spill Prevention Control and Countermeasure Plan requirements, which are federal programs administered by EPA.⁷⁸ Also, many states have implemented audit policies which, in some cases such as the “Texas Environmental Health & Safety Audit Privilege Act,” provide for immunity from penalties.⁷⁹

D. WHISTLEBLOWERS AND OTHER PARTIES

Occasionally, regulated entities come to the attention of EPA by company employees or contractors. Good environmental management practices are prudent insurance against this sort of concern.⁸⁰ Members of the public and citizen groups are also frequently the source of enforcement actions. Good community relations can reduce the potential for enforcement from these sources.

IV. ENFORCEMENT PROCESS AND EXIT POINTS

As indicated, once EPA initiates civil enforcement action, there are two main routes it can pursue: judicial action or administrative action.⁸¹ The following is a discussion of both, with the bulk of the attention on administrative enforcement.

A. REFERRAL TO U.S. DEPARTMENT OF JUSTICE

One outcome of an inspection or information request is an EPA decision not to undertake administrative enforcement but rather to refer the case to the U.S. Department of Justice (DOJ) for the filing of a civil or criminal action in federal court.⁸² In some cases a given statute (e.g. the Clean Air Act) contains a penalty cap that requires a referral if EPA is seeking penalties exceeding the cap.⁸³ In a civil action, DOJ will ex-

76 Clean Air Act § 113, 42 U.S.C. § 7413 (2012).

77 See Texas: Decision on Final Authorization of State Hazardous Waste Management Program, 49 Fed. Reg. 48,300, 48,300 (Dec. 12, 1984) (delegating Texas base RCRA authority). There have been many authorized revisions since then. See Texas: Final Authorization of State Hazardous Waste Management Program Revision, 77 Fed. Reg. 13,200, 13201–02 (Mar. 6, 2012).

78 See 40 C.F.R. pt. 112 (2012).

79 TEX. REV. CIV. STAT. ANN. art. 4447cc (West 2012).

80 The major environmental statutes have provisions protecting whistleblowers from retaliation. See, e.g., Clean Air Act § 322, 42 U.S.C. § 7622 (2012); TSCA § 23, 15 U.S.C. § 2622 (2012).

81 ADMIN. LAW JUDGES PRACTICE MANUAL, *supra* note 8.

82 See *id.*

83 See e.g., Clean Air Act § 13(d), 42 U.S.C. § 7413(d) (2012); Clean Water Act § 309(g)(2), 33 U.S.C. § 1319(g)(2) (2012).

plore a possible settlement as a matter of policy.⁸⁴ Often, negotiation with DOJ will result in the lodging of a Consent Decree simultaneous with the filing of the Complaint.⁸⁵

B. ADMINISTRATIVE LITIGATION

If EPA decides that it has sufficient information to proceed with an administrative enforcement action, EPA can choose a number of different vehicles to pursue a penalty depending upon the statutory basis for the action. Those range from a lowly field citation, to a notice of violation, all the way up to a formal pleading that is similar to the filing of a lawsuit in a federal court, but is filed in an EPA administrative docket instead.⁸⁶ This process is formalized by a hearing process set forth in EPA's Consolidated Rules of Practice,⁸⁷ as described below. Unlike negotiations with DOJ in a referral context, which can progress at a speed determined by DOJ, negotiations with EPA in administrative litigation must occur within a regimented process and schedule.⁸⁸

1. COMPLAINT AND ANSWER

The service of a Complaint by EPA actually initiates the administrative litigation process that is intended to culminate in a trial-type hearing⁸⁹—even though most of these proceedings get settled before the formal litigation stages unfold.⁹⁰ The Complaint is typically accompanied by a Compliance Order and a civil penalty assessment.⁹¹ The recipient of the Complaint and Compliance Order, called a Respondent, will generally have 30 days to file a response, including an Answer and Request For Hearing.⁹² If the Respondent fails to file an Answer and Request For Hearing within the 30-day period, the Complaint will be deemed admitted and the Compliance Order will become final and fully enforceable according to its terms.⁹³

2. CONTENTS OF ANSWER

The Answer must specifically admit, deny, or otherwise specifically respond to each allegation in the Complaint.⁹⁴ A motion to dismiss some or all of EPA's complaint may

84 See e.g., U.S. ENVTL. PROT. AGENCY, GM-73, PROCESS FOR CONDUCTING PRE-REFERRAL SETTLEMENT NEGOTIATIONS (1988).

85 See 40 C.F.R. § 22.13(b) (2012).

86 See *What Enforcement Actions Should be Taken?*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/oecaerth/civil/rcra/ustcompendium/enforcement.html> (last updated Aug. 20, 2009); *Frequently Asked Questions*, U.S. ENVTL. PROT. AGENCY, <http://www.epa-echo.gov/echo/faq.html> (last updated Feb. 6, 2013).

87 40 C.F.R. pt. 22 (2012).

88 See *id.*

89 *Id.* §§ 22.13, 22.14.

90 *Introduction: Environmental Enforcement and Compliance*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/region9/enforcement/intro.html#enforcement> (last updated May 23, 2011).

91 See Lisa, *supra* note 8, at 13–14. The authority for the Compliance Order and civil penalty assessment come from the environmental statute being enforced. *Id.*

92 40 C.F.R. § 22.15(a) (2012).

93 *Id.* § 22.17.

94 *Id.* § 22.15(b).

also be filed at this stage.⁹⁵ In addition, the Respondent must request a hearing to preserve its rights to a hearing to contest EPA's allegations.⁹⁶ It is important to engage a lawyer who understands the substantive law and can work with the Respondent to marshal the essential facts and legal defenses. *Do not think you can submit an Answer and Request for Hearing without legal support.*

3. PRELIMINARY SETTLEMENT DISCUSSIONS

Often after an Answer and Request for Hearing are filed, the parties will jointly request a stay of further proceedings for some period of time—maybe 30 or 60 days—to complete settlement negotiations.⁹⁷ Usually, the Complaint and Answer will be filed at the EPA regional level, although some proceedings can be initiated out of EPA Headquarters.⁹⁸

4. ASSIGNMENT OF ADMINISTRATIVE LAW JUDGE

Once the Answer is filed, the responsible (usually regional) hearing clerk will transfer the file to the Office of Administrative Law Judges in Washington, D.C. for assignment to an Administrative Law Judge (ALJ).⁹⁹ From that point forward, the ALJ is responsible for all proceedings through a final post-hearing decision, including scheduling of pre-hearing submissions, presiding over discovery, and scheduling the hearing.¹⁰⁰

5. ALTERNATIVE DISPUTE RESOLUTION

At any time after the complaint is filed, the parties can elect to engage in alternative dispute resolution procedures (ADR).¹⁰¹ This election does not automatically stay the proceedings in the absence of an order from the ALJ.¹⁰² ADR procedures can range from informal telephone exchanges among the parties and the ALJ to more formal proceedings before a third-party neutral person.¹⁰³

6. PRE-HEARING EXCHANGE, DISCOVERY, AND MOTIONS

Similar to pre-trial practice in a court proceeding, the EPA and Respondent need to exchange relevant documents and information supporting the claims and defenses.¹⁰⁴ This is known as the “pre-hearing information exchange.”¹⁰⁵ It can get quite voluminous depending on the nature of the claims and defenses.

95 *Id.* §§ 22.16(a), 22.20(a).

96 *Id.* § 22.15(c).

97 *See Lisa, supra* note 8, at 38.

98 *See id.* at 6.

99 40 C.F.R. § 22.21(a) (2012).

100 *See id.* §§ 22.21–22.27.

101 Alternative Dispute Resolution Act, 5 U.S.C. §§ 581–584 (2012); 40 C.F.R. § 22.18(d) (2012). *See also* Policy on Alternate Dispute Resolution, 65 Fed. Reg. 81,858 (Dec. 27, 2000).

102 40 C.F.R. § 22.18(d)(2).

103 *Id.* § 22.18(d).

104 *Id.* § 22.19.

105 *Id.*

The parties may also perform other types of discovery, including document requests, interrogatories, and depositions,¹⁰⁶ although the availability of these additional discovery processes is more limited than in judicial proceedings. The ALJ has the power to subpoena witnesses for deposition and hearing.¹⁰⁷ Similar to judicial proceedings, the parties also may submit various motions regarding aspects of the case, including motions to dispose of some or all of the claims by EPA or defenses by the Respondent.¹⁰⁸

7. THE HEARING

The hearing is a trial-type proceeding, with witnesses and introduction of evidence.¹⁰⁹ The ALJ is both the finder of fact and the applicator of law.¹¹⁰ ALJ hearings are typically conducted in state or federal courthouses.¹¹¹ The parties can propose locations that will facilitate the attendance of necessary parties.¹¹² Witnesses, including expert witnesses, can be subpoenaed.¹¹³

8. THE FINAL DECISION

Following conclusion of the hearing, the ALJ issues an Initial Decision that contains findings of fact and conclusions of law.¹¹⁴ That decision becomes a final order unless a party moves to reopen or set aside the decision, appeals, or the Environmental Appeals Board elects to review the decision on its own.¹¹⁵ The ALJ also determines the appropriate final relief, including denial, in whole or in part, of EPA's requested relief and/or approval of a final order requiring: (i) the payment of civil penalties; and (ii) performance of compliance and/or remedial measures (often referred to by attorneys as "injunctive relief").¹¹⁶

9. APPEAL RIGHT

A Respondent may appeal a final decision to the EPA Environmental Appeals Board (EAB).¹¹⁷ The EAB currently consists of three judges appointed by the EPA Administrator.¹¹⁸ The EAB has appellate jurisdiction over enforcement cases and permit actions under designated statutes, including the Clean Air Act, Clean Water Act, and

106 *Id.* § 22.19(e).

107 *Id.* § 22.19(e)(4).

108 *See id.* § 22.20.

109 *See id.* §§ 22.22–22.26; *see generally* ADMIN. LAW JUDGES PRACTICE MANUAL, *supra* note 8.

110 *See* 40 C.F.R. §§ 22.22–22.26; *see generally* ADMIN. LAW JUDGES PRACTICE MANUAL, *supra* note 8.

111 40 C.F.R. § 22.21(d) (2012) (“The location of the hearing shall be determined in accordance with the method for determining the location of a prehearing conference under § 22.19(d).”); *see also id.* § 22.19(d).

112 *See id.* § 22.19(b)(6).

113 *Id.* § 22.21(b) (2012).

114 *Id.* § 22.27(a) (2012).

115 *Id.* § 22.27(c) (2012).

116 *Id.* § 22.27(a)–(b) (2012).

117 *Id.* § 22.30 (2012); *see also* ENVTL. APPEALS BD., U.S. ENVTL. PROT. AGENCY, PRACTICE MANUAL (2010), available at <http://www.epa.gov/eab/pmanual.pdf>.

118 40 C.F.R. § 1.25(e)(1) (2012).

RCRA.¹¹⁹ In certain circumstances, the EAB may refer an appeal directly to the EPA Administrator.¹²⁰

C. SETTLEMENT BY CONSENT AGREEMENT AND FINAL ORDER

At almost any time during an administrative enforcement action, but preferably early on, the parties can seek to settle the action before it goes to a hearing and final resolution.¹²¹ Unlike settlement of judicial actions that requires the court's consent, some administrative settlements can be reached and finalized between EPA and the respondent alone, while others that have reached the stage where an ALJ has been assigned must be blessed by the ALJ. Below is a discussion of settlement considerations after an administrative complaint has been filed by EPA. As you would expect, penalties are at the forefront of settlement negotiations.

1. THE BASICS

EPA and the Respondent can negotiate a settlement of the enforcement action by entering into an agreement (consent agreement) that is embodied in a legally enforceable administrative order on consent (final order).¹²² Together, these settlement components are referred to as a "Consent Agreement and Final Order" (CAFO).

To conclude a mutually agreeable CAFO, the parties have to negotiate both the civil penalty and the compliance corrective/remedial measures that the Respondent will take to resolve the issues raised in the Complaint (and maybe some issues that were not identified in the Complaint).¹²³ The compliance and remedial measures are usually referred to as the "injunctive relief" part of the CAFO.

2. PENALTY NEGOTIATION/PENALTY POLICIES

Typically, one of the first steps in negotiating an agreed settlement on penalties is a principled discussion on the application of EPA's various civil penalty policies. As discussed below, when deciding what penalty amount to seek in an administrative enforcement action, EPA is instructed by the federal environmental statutes to take into account factors such as the nature, circumstances, extent and gravity of the violation, or violations, and the violator's ability to pay, prior history of violations, decree of culpability, economic benefit or savings, and other matters as justice may require. Rather than developing regulations to implement these instructions, EPA has issued penalty policies intended to give the public notice of EPA's internal efforts to follow these statutory mandates.

a. TYPES OF PENALTY POLICIES

Under the umbrella of EPA's "Policy on Civil Penalties," EPA has developed separate penalty policies relating to appropriate settlement amounts for actions under each of

119 See *id.* §§ 22.1, 22.4(a)(1).

120 *Id.* § 22.4(a)(1).

121 See *id.* § 22.18(b)(1) ("The Agency encourages settlement of a proceeding at any time if the settlement is consistent with the provisions and objectives of the Act and applicable regulations.").

122 *Id.* § 22.18(b)(2).

123 *Id.* § 22.18(b)-(c).

the major federal environmental statutes and, in some cases, has separate policies for different programs within a statute.¹²⁴

A refining company, for example, may encounter the following policies in an administrative penalty action:

- The Civil Penalty Policy for Section 311(b)(3) and Section 311(j) of the Clean Water Act (August 1998);¹²⁵
- The Unleaded Gasoline Civil Penalty Policy for Administrative Hearings (January 14, 1993);¹²⁶
- The Clean Air Act Stationary Source Civil Penalty Policy (October 25, 1991);¹²⁷
- The Interim Diesel Civil Penalty Policy (February 8, 1994);¹²⁸
- The RCRA Civil Penalty Policy (June 2003);¹²⁹
- The Enforcement Response Policy for Sections 304, 311 and 312 of the Emergency Planning and Community Right-To-Know Act and Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (September 30, 1999);¹³⁰ and
- The Volatility Civil Penalty Policy (December 1, 1989).¹³¹

All of these policies are available on EPA's website.¹³² These and other EPA penalty policies are applied nationally by EPA and are intended to provide national consistency

-
- 124 U.S. ENVTL. PROT. AGENCY, No. GM-21, POLICY OF CIVIL PENALTIES (1984), *available at* <http://www.epa.gov/enforcement/documents/policies/epapolicy-civilpenalties021684.pdf> [hereinafter POLICY OF CIVIL PENALTIES]; *see also* U.S. ENVTL. PROT. AGENCY, No. GM-22, A FRAMEWORK FOR STATUTE-SPECIFIC APPROACHES TO PENALTY ASSESSMENTS: IMPLEMENTING EPA'S POLICY ON CIVIL PENALTIES (1984), *available at* <http://www.epa.gov/enforcement/documents/policies/epapolicy-civilpenalties021684.pdf>.
- 125 U.S. ENVTL. PROT. AGENCY, CIVIL PENALTY POLICY FOR SECTION 311(B)(3) AND SECTION 311(J) OF THE CLEAN WATER ACT 15-19 (1998), *available at* <http://www.epa.gov/enforcement/water/documents/policies/311pen.pdf>.
- 126 Memorandum from Mary T. Smith, Dir., Field Operations and Support Div., U.S. Env'tl. Prot. Agency, to Field Operation and Support Div. Pers. (Jan. 14, 1993), *available at* <http://www.epa.gov/enforcement/air/documents/policies/mobile/adminpenpol.pdf>.
- 127 U.S. ENVTL. PROT. AGENCY, CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY (1991), *available at* <http://www.epa.gov/enforcement/air/documents/policies/stationary/penpol.pdf>.
- 128 Memorandum from Mary T. Smith, Dir., Field Operations and Support Div., U.S. Env'tl. Prot. Agency, to Field Operation and Support Div. Pers. (Feb. 8, 1994), *available at* <http://www.epa.gov/enforcement/air/documents/policies/mobile/dieselpenpol.pdf>.
- 129 Memorandum from John Peter Suarez, *supra* note 75.
- 130 U.S. ENVTL. PROT. AGENCY, ENFORCEMENT RESPONSE POLICY FOR SECTIONS 304, 311 AND 312 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT AND SECTION 103 OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (1999), *available at* <http://www.epa.gov/enforcement/waste/documents/policies/epcra304.pdf>.
- 131 Memorandum from Marc R. Hillson, Acting Dir., Field Operations and Support Div., U.S. Env'tl. Prot. Agency, to Field Operation and Support Div. Pers. (Dec. 1, 1989), *available at* <http://www.epa.gov/enforcement/air/documents/policies/mobile/rvppenpol.pdf>.
- 132 *Policy, Guidance & Publications*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/enforcement/documents/> (last updated on Mar. 29, 2013).

in penalty calculations. While the policies can vary on the methods for calculating a penalty, there are common general concepts and similarities between the policies that we will review.

b. PENALTY COMPONENTS

Under the policies, penalties are derived from a combination of two major components: (i) gravity-based penalties; and (ii) economic benefit penalties.¹³³ The gravity-based component is intended to reflect the seriousness of the violation. Many of the penalty policies use a matrix where the extent of the violation and the potential for harm are defined for a particular violation, and a penalty amount or range is identified.¹³⁴ The policies all provide for adjustment factors, upward and downward, for things such as culpability, history of prior violation, good-faith efforts to comply, the ability of the violator to pay the penalty (which EPA determines through the use of a computer model, referred to as “ABEL”), willfulness or gross negligence, litigation considerations, and other factors “as justice may require.”¹³⁵ Finally, many of the penalty policies make specific reference to the possibility of mitigating some portion of the gravity-based penalty through the performance of an environmentally-beneficial project, referred to as a “Supplemental Environmental Project” (or SEP), discussed below.

c. ECONOMIC BENEFIT COMPONENT

The economic benefit component of the penalty addresses EPA’s belief that delayed or avoided compliance can provide an unfair economic advantage to a violator.¹³⁶ EPA uses a computer model referred to as “BEN” to calculate the amount of savings a violator may have enjoyed as a result of its delayed or avoided compliance.¹³⁷ Economic benefit can include things such as capital costs, operations and maintenance costs, and the time-value of money based on applicable interest rates.¹³⁸ In our experience, it is not uncommon for the economic benefit portion of a penalty to exceed or far exceed the amount of the penalty calculated for the gravity-based portion. Also, no adjustments or mitigation through performance of a SEP is allowed for the economic benefit component of the penalty under the civil penalty policies.¹³⁹ EPA must, however, remain within its statutory penalty authority that limits the amount of the penalty that EPA can seek either administratively or judicially.¹⁴⁰

133 POLICY OF CIVIL PENALTIES, *supra* note 124.

134 See e.g., Memorandum from John Peter Suarez, *supra* note 75.

135 See e.g., *id.* at 33–41.

136 POLICY OF CIVIL PENALTIES, *supra* note 124.

137 Memorandum from Granta Y. Nakayama, Assistant Adm’r, U.S. Env’tl. Prot. Agency, to Reg’l Fed. Facility Senior Managers et al. (Feb. 13, 2006), available at <http://www.epa.gov/compliance/resources/policies/federalfacilities/enforcement/cleanup/guid-econ-ben-noncomp-2-13-06.pdf>.

138 POLICY OF CIVIL PENALTIES, *supra* note 124, at 7–13.

139 Memorandum from Steven Herman, Assistant Adm’r, U.S. Env’tl. Prot. Agency, to Reg’l Adm’rs (Apr. 10, 1998), available at <http://www.epa.gov/enforcement/documents/policies/sep/fnl-sup-hermn-mem.pdf>.

140 See e.g., Clean Water Act §§ 309(b)(2)(A), 311(b)(6)(B)(i), 309(b)(2)(B), 311(b)(6)(B)(ii), 33 U.S.C. §§ 1319(b)(2)(A), 1321(b)(6)(B)(i), 1319(b)(2)(B),

d. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

Many of EPA's civil penalty policies contain a section concerning the opportunity for a respondent in an enforcement action to reduce the cash amount of a penalty due to the United States by paying some portion of an administrative penalty toward an environmentally-beneficial project, commonly known as a supplemental environmental project (SEP). EPA's policy on SEPs, the May 1, 1998 "Supplemental Environmental Projects Policy" (SEP Policy), defines a SEP as an environmentally-beneficial project that a respondent agrees to undertake in settlement of an enforcement action but which the respondent is not otherwise legally required to perform.¹⁴¹ The SEP Policy encourages the use of SEPs in settlement of enforcement actions that are consistent with the SEP Policy.¹⁴²

(1) LEGAL REQUIREMENTS FOR SEPs

To be consistent with the SEP Policy, a project must meet certain legal requirements, and fall into one of seven defined categories of SEPs.¹⁴³ The legal requirements are:

- The project is not inconsistent with any provision of the underlying statutes.
- The project advances the objectives of the underlying statutes and has a relationship or "nexus" to the violation. Nexus exists if one of the following is true: (i) the project is designed to reduce the likelihood that similar violations will occur in the future; (ii) the project reduces the adverse impact to public health or the environment to which the violation at issue contributes; or (iii) the project reduces the overall risk to public health or the environment potentially affected by the violation at issue.
- EPA may not play a role in managing or controlling the funds to be used for the project and may not retain authority to manage or administer the SEP.
- The type and scope of the project must be defined in a signed settlement agreement.
- The project cannot (i) satisfy a statutory obligation of the EPA; (ii) provide EPA with additional resources to perform an activity for which the legislature has specifically appropriated or earmarked funds; (iii) provide additional resources to support specific activities performed by the EPA or its contractors; or (iv) provide a federal grantee with additional funds to perform a specific task identified in an assistance agreement.¹⁴⁴

(2) APPROVED CATEGORIES OF SEPs

The SEP Policy specifies seven categories of projects that EPA acknowledges are legitimate SEPs.¹⁴⁵ The seven categories are:

- 1) public health;

1321(b)(6)(B)(ii); Clean Air Act §113(d), 42 U.S.C. § 7413(d); RCRA §§ 3008(a)(3), (c), (g), (h)(2), 42 U.S.C. §§ 6928(a)(3), (c), (g), (h)(2); TSCA § 16, 15 U.S.C. § 2615.

141 Memorandum from Steven Herman, *supra* note 139.

142 *Id.*

143 *Id.*

144 *Id.*

145 *Id.*

- 2) pollution prevention;
- 3) pollution reduction;
- 4) environmental restoration and protection;
- 5) assessments and audits;
- 6) environmental compliance promotion; and
- 7) emergency planning and preparedness.

EPA has the authority to approve other types of projects of merit.¹⁴⁶

In a settlement negotiation, one of the key points of contention is always how much total credit will EPA give to the respondent for expenditures relating to the project. There are two considerations here: (i) what percentage of the total penalty will EPA require to be paid in cash (sometimes called the “cash cost”); and (ii) how much credit will EPA grant for each dollar spent on the project (referred to as “penalty mitigation credit”).¹⁴⁷ For cash cost, the SEP Policy states that the amount must be equal to or greater than the economic benefit component of the penalty plus ten percent of the gravity-based penalty, or twenty-five percent of the gravity-based penalty, whichever is greater.¹⁴⁸

To determine what penalty mitigation credit will be granted, agreement must be gained about the actual cost of the project to the respondent.¹⁴⁹ The net present after tax cost is the maximum that EPA will take into consideration in determining penalty mitigation credit.¹⁵⁰ EPA uses a computer model called “PROJECT” and related guidance documents to calculate this amount.¹⁵¹ The SEP Policy states that, ordinarily, the mitigation credit percentage should not exceed eighty percent of the SEP cost (*i.e.*, 80 cents credit for each dollar spent up to the maximum SEP cost).¹⁵² However, according to the SEP Policy and related guidance memoranda, when: (i) a small business performs a project, or (ii) the project falls into the pollution prevention category, then the percentage may be as high as one-hundred percent (*i.e.*, dollar-for-dollar) if the project is demonstrated to be of “outstanding quality.”¹⁵³

Although EPA officially supports the use of SEPs, it is increasingly difficult to negotiate a SEP for which reasonable penalty mitigation credit will be given by EPA. This may be a function of the times, including shrinking budgets.

e. STIPULATED PENALTIES

One mechanism used by EPA to encourage compliance with a settlement agreement, and to penalize non-compliance, is stipulated penalties. A stipulated penalty is an amount agreed upon by the parties in advance that will be paid by the respondent, without the need for EPA to bring a separate enforcement action, if EPA finds a viola-

146 *Id.*

147 *Id.*

148 *Id.*

149 *Id.*

150 *Id.*

151 *Id.* If the project has a negative cost during the period of performance of the SEP, then the project is deemed to be profitable to the respondent, and not appropriate for use as a SEP.
Id.

152 *Id.*

153 *Id.*

tion of a settlement agreement.¹⁵⁴ Stipulated penalties often are escalating so that the penalties increase the longer non-compliance continues.¹⁵⁵ Even if EPA insists on a stipulated penalty provision in a settlement agreement, there are several aspects of stipulated penalties that can be negotiated (with widely varying chances for success). To negotiate a favorable stipulated penalty provision, you should try to:

- Minimize the number of milestones and other actions subject to penalties;
- Compare penalties in other similar enforcement actions, especially in the same EPA Region;
- Avoid EPA's ability to "double dip" on statutory penalties in addition to stipulated penalties;
- Explore provisions allowing the respondent to do a SEP in lieu of some portion of the penalty;
- Provide that EPA has discretion not to seek stipulated penalties;
- Ensure that stipulated penalties are subject to dispute resolution, and avoid accrual of stipulated penalties during the dispute resolution period;
- Try to secure an opportunity to cure a violation before stipulated penalties accrue;
- Require EPA to give notice of a violation before stipulated penalties can accrue; and
- Seek a reasonable period of time in which to pay stipulated penalties that are due.

3. INJUNCTIVE RELIEF

Although penalties tend to monopolize settlement considerations, it is important not to overlook the fact that EPA will almost certainly seek to impose compliance/performance obligations in the settlement in addition to any penalties and, in some cases, EPA is required to do so.¹⁵⁶ These obligations, referred to as injunctive relief, must be examined closely by a respondent to determine whether they are, in fact, achievable, and to plan for the cost of such relief. Additionally, EPA will impose a schedule for complying with the injunctive relief that almost always is very ambitious. The cost, components, and schedule of any injunctive relief should be the subject of serious consideration and discussion, and should be given as much weight as the cash penalty under discussion in the settlement negotiation.

4. SETTLEMENT TERMS (HELPFUL AND UNHELPFUL TERMS AND CONDITIONS)

Although EPA has published a number of model settlement documents for specific situations, and every negotiated document is different, there are common provisions that

154 See, e.g., Memorandum from Thomas L. Adams, Jr., Assistant Adm'r, U.S. Env'tl. Prot. Agency, to Reg'l Adm'rs, Regions I-X et al. (Sept. 21, 1987), available at <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/stip-hazwst-mem.pdf>.

155 *Id.*

156 See, e.g., Eric V. Schaeffer, Dir. Office of Regulatory Enforcement, U.S. Env'tl. Prot. Agency, to Water Prot./Management Div. Dir., Regions I-X et al. (Sept. 29, 1999), available at http://water.epa.gov/type/wetlands/outreach/upload/injunctiverelief_sec404.pdf.

will appear in most administrative settlement agreements.¹⁵⁷ Below, purely as a practice aid, is a brief comparison of some of the differing approaches taken in these common settlement provisions.

Type of Settlement Provision	EPA May Seek To:	Respondent Will Seek To:
Scope of Settlement	(i) Make settlement as narrow as possible and reserve future freedom of action; and (ii) limit settlement to the violations specifically alleged.	Extend settlement as broadly as possible based on all of the information EPA gathered in an inspection or otherwise to avoid further conflict.
Admissions	Have respondent admit jurisdiction, fact allegations and conclusions of law. Sometimes proposes “neither admits nor denies.”	Avoid admitting allegations and conclusions of law because of potential legal implications outside of the immediate proceeding.
Parties Bound	Bind not only the respondent but a broad array of parties including successors, assigns, consultants, agents, attorneys, etc.	Narrow the binding effect only on the respondent, i.e. the party who is responsible for ensuring compliance
Waivers	Have respondent waive: (i) any right to contest the allegations; (ii) any right to appeal the proposed final order contained; and (iii) defenses that were raised or could have been raised.	Limit waiver such that it does not negate future defenses.
Findings of Fact/Conclusions of Law	Describe broadly the facts (sometimes in a biased or inflammatory way) and make broad conclusions about the relationship between facts and the law.	Ensure accuracy, delete irrelevant statements, and limit to only those findings and conclusions necessary to support the action.
Sampling/Site Access/Document Availability	Gain access to all information kept by the respondent and broad access to the respondent’s facility.	(i) Limit the access to documents and information to those required under the settlement and exclude access to legally-privileged information; and (ii) gain reciprocal access to all information gathered or developed by EPA (including split samples).

157 See e.g., Bruce M. Diamond, Dir., Office of Waste Programs, U.S. Env’tl. Prot. Agency, to Dir., Waste Management Div., Regions I, IV, V. & VII et al. (Mar. 30, 1990), available at <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/moduao-rira-rpt.pdf>; Susan E. Bromm, Dir., Office of Site Remediation Enforcement, U.S. Env’tl. Prot. Agency, to Dir., Office of Site Remediation Enforcement, Region I et al. (Jan. 30, 2007), available at <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/rev-aoc-remove-mem.pdf>.

Type of Settlement Provision	EPA May Seek To:	Respondent Will Seek To:
Financial Responsibility	(i) Obtain approval rights over instrument choices; and (ii) require financial assurance for every action required under the settlement.	(i) Limit financial responsibility demonstrations to long-term expenditures; (ii) avoid having to fund financial responsibility mechanisms while also paying to perform (i.e. double payment); and (iii) maintain flexibility to choose mechanisms/instruments.
Stipulated Penalties	(i) Impose high daily penalties that escalate as a violation continues; (ii) reserve rights to take any other enforcement as well; and (iii) to collect penalties during dispute resolution.	(i) Lower daily penalties, (ii) slow escalation, if any; (iii) limit EPA's ability to take other penalty action, i.e. "double-dipping"; and (iv) a provision authorizing EPA <i>not</i> to seek stipulated penalties in its discretion. <i>See also</i> Section IV.C.2.e. herein on Stipulated Penalties.
Notice and Payment Periods	Provide short time periods for required notices, payments, and other submittals under the settlement.	(i) Lengthen periods to time reasonably necessary to perform the required action; and (ii) make deadlines and manner of submission clear.
Dispute Resolution	(i) limit the amount of time allotted to dispute resolution, and collect stipulated penalties even though they are disputed; (ii) prohibit judicial review of disputes unless and until enforcement action is brought.	(i) add an informal discussion period at the beginning of dispute resolution, (ii) provide sufficient time to present reasoned argument on point in dispute, (iii) avoid imposition of disputed stipulated penalties during initial consultative stage of dispute resolution process even if respondent's position not upheld.
Force Majeure	Limit the definition of a force majeure event, including not allowing financial inability to qualify, and impose short deadlines on notice of force majeure to further inhibit ability to make a claim.	(i) Expand definition of force majeure event to include failure of an agency to issue necessary approvals, or delay in same, commercial unavailability of equipment; and impossibility of performance; (ii) lengthen time allowed to give notice of claim;

Type of Settlement Provision	EPA May Seek To:	Respondent Will Seek To:
	(iii) specify that stipulated penalties will not accrue during delay caused by force majeure event; and (iv) allow dispute resolution if EPA disagrees that a force majeure event has occurred.	
Termination Releases/ Covenants?	(i) Keep the grounds for termination vague and open ended; and (ii) refuse liability releases or covenants not to sue.	(i) Build a predictable timeframe for completion and termination, including termination rights where appropriate; and (ii) derive reasonable consideration, or future protection from claims, for having resolved the action by consent.

V. CONCLUSION

As was the case in that celebrated film that won the Best Movie Oscar in 1953, the outcome of these EPA administrative penalty dramas may entail some heartbreak. However, the more familiar company environmental and business managers are with the process, the better able they will be to achieve an outcome that will be fair and workable. It is our hope that the preceding discussion, as well as the associated conference presentation, will contribute to that end.

Joe Guida is the founding Principal of Guida, Slavich & Flores, P.C. with offices in Dallas and Austin, Texas. He has practiced environmental law since 1979, when he received his law degree from the University of Virginia School of Law. He and his firm have a diversified, national environmental law practice covering air and water pollution control, solid and hazardous waste management issues and toxic substances.

Jean Flores is a founding Shareholder in the environmental law firm of Guida, Slavich & Flores, P.C. and the Vice Chair of the Environmental and Natural Resources Law Section of the State Bar of Texas. Her practice focuses on environmental permitting, compliance and enforcement under all of the major federal and Texas pollution control statutory and regulatory programs.

ATTACHMENT 1

Review of Selected Major Federal Environmental Statutes Administrative Penalty Authorities

- *The Clean Water Act*
 - Two types of administrative penalties for violations of the National Pollutant Discharge Elimination System provisions (which include direct discharges, storm water, pre-treatment, and sewage sludge discharges), and for violations of the requirements for oil and hazardous substance discharges: “Class I” and “Class II.”
 - Class I penalty assessed under Section 309(b)(2)(A) or Section 311(b)(6)(B)(i) may not exceed \$16,000 per violation, and the total maximum may not exceed \$37,500.¹⁵⁸
 - Class II penalty assessed under Section 309(g)(2)(B) or Section 311(b)(6)(B)(ii) may not exceed \$16,000 per violation and the maximum may not exceed \$177,500.¹⁵⁹
 - Collectable only after EPA gives the violator a notice of proposal to issue an order collecting a penalty, and an opportunity to request a hearing on the proposed order. Such order must go through public notice and comment, and is subject to judicial review. See Sections 309(g)(8) and 311(b)(6)(G) of the CWA.¹⁶⁰
- *The Clean Air Act*
 - Section 113(d) administrative penalties for most violations up to \$37,500 per day of violation but limited to matters where the total penalty sought does not exceed \$295,000 and the first alleged date of violation occurred no more than 12 months prior to the initiation of the administrative action.¹⁶¹
 - Section 113(d)(3) authorizes field citations not to exceed \$7,500 per day of violation. A penalty assessed by a field citation is subject to judicial review.
 - Separate penalty provisions for Motor Vehicle Emissions and Fuels Standards. For the requirements relating to regulation of fuels, EPA can assess penalties up to \$37,500 and economic benefit, but not to exceed \$295,000.¹⁶²
 - The penalty caps can be waived if the EPA Administrator and the U.S. Attorney General jointly determine that a matter involving a larger penalty amount or longer period of violation is “appropriate for administrative penalty action.” Such a determination is not subject to judicial review.
 - Under the fuels regulations in 40 CFR part 80, violations of requirements establishing a regulatory standard based upon a multi-day averaging period constitute a separate day of violation for each and every day in the averaging period.

158 33 U.S.C. §§ 1319(g)(2)(A), 1321(b)(6)(B)(i).

159 *Id.* §§ 1319(g)(2)(B), 1321(b)(6)(B)(ii).

160 *Id.* §§ 1319(g)(8), 1321(b)(6)(G).

161 42 U.S.C. § 7413(d).

162 *Id.* § 7413(d)(3).

- All of the above penalties are assessed by issuance of an order, after written notice and an opportunity to request a hearing, and are subject to judicial review.
- *The Resource Conservation and Recovery Act*
 - EPA can issue compliance orders under Sections 3008(a)(3), (c)(g), and (h)(2) to assess penalties, not to exceed \$37,500 per violation, per day, for violations of the hazardous waste management program requirements, including failure to take corrective action under a compliance order.¹⁶³
 - There is no penalty cap under RCRA.
 - For violations of the petroleum underground storage tank program, such as release detection, prevention and correction requirements, Section 9006(d) allows a penalty not to exceed \$16,000 per tank per day of violation. For failure to comply with an order relating to underground storage tanks, Section 9006(a)(3) allows a penalty of not more than \$37,500 for each day of noncompliance.¹⁶⁴
- *The Emergency Planning and Community Right-to-Know Act*
 - Two types of administrative penalties for failure to comply with Section 304 emergency notification requirements: “Class I” and “Class II.”¹⁶⁵
 - Section 325(b)(1) allows a “Class I” administrative penalty that may not exceed \$37,500 **per violation**.¹⁶⁶
 - If a violation continues, or there is more than one violation continues, under Section 325(b)(2) EPA may seek a “Class II” penalty that does not exceed \$37,500 **per day** of the total amount assessed cannot exceed more than \$107,500 **per day**.¹⁶⁷
 - For failure to comply with Section 312 hazardous chemical inventory requirements¹⁶⁸ or Section 313 toxic release inventory requirements, Section 325(c)(1)¹⁶⁹ allows a penalty not to exceed \$37,500 per violation per day. 40 CFR §372.18 implements the TRI penalty.
 - For failure to comply with EPCRA’s Section 311 material safety data sheet requirements,¹⁷⁰ Section 323(b) medical emergency requirement,¹⁷¹ or Section 322(a)(2) information submittal requirement,¹⁷² Section 325(c)(2) allows a penalty not to exceed \$16,000 per violation per day.¹⁷³
 - If a trade secret claimant presents insufficient support, and the trade secret claim is frivolous, Section 325(d)(1) allows a penalty of \$37,500 per claim.¹⁷⁴

163 42 U.S.C. §§ 6928(a)(3), (c), (g), (h)(2).

164 *Id.* §§ 6991e(d) & 6991e(a)(3).

165 *The Emergency Planning and Community Right-to-Know Act*, 42 U.S.C. § 11004.

166 *Id.* § 11045(b)(1).

167 *Id.* § 11045(b)(2).

168 *Id.* § 11022.

169 *Id.* § 11023.

170 *Id.* § 11021.

171 *Id.* § 11043(b).

172 *Id.* § 11042(a)(2).

173 *Id.* § 11045(c)(2).

174 *Id.* § 11045(d)(1).

- *Comprehensive Environmental Response, Compensation, and Liability Act*
 - Although CERCLA primarily is a remedial statute, it does contain some affirmative requirements and penalties for violations of those requirements.
 - Section 109 (a) and (b) allow assessment of either a “Class I” or a “Class II” administrative penalty where there is a violation of the immediate release reporting requirement or the recordkeeping requirements under Section 103, financial assurance requirements under Section 108, or orders, consent decrees or agreements under Sections 122 and 120.¹⁷⁵ 40 CFR §302.7(a) implements release reporting penalties.
 - Class I penalty cannot exceed \$37,500 **per violation**.
 - If a violation continues, or there is more than one violation continues, a Class II penalty may be assessed but it cannot exceed \$37,500 **per day** of the total amount assessed cannot exceed more than \$107,500 **per day**.
 - Penalties assessed by an order after notice and an opportunity for a hearing. Judicial review of an order assessing the penalty is allowed.
- *The Toxic Substances Control Act*
 - Section 16 allows a penalty not to exceed \$37,500 per day per violation for most violations, including use of a chemical substance manufactured, processed or distributed in commerce in violation of the statute.¹⁷⁶
 - Section 207 allows a penalty of \$7,500 per day for violations of the Asbestos Hazard Emergency Response Act provisions of the statute.¹⁷⁷
 - Penalties are assessed through issuance of an order.

175 42 U.S.C. §§ 9609, 9603, 9608, 9622 & 9620.

176 15 U.S.C. § 2615.

177 *Id.* § 2647.

OFFSHORE OIL AND GAS: CHARTERING A NEW COURSE IN 2012

BY AMBER L. MACIVER¹

I.	Introduction	159
II.	Economic Background	160
III.	Liability For Releases	161
	A. Oil Pollution Act of 1990	161
	1. Background	161
	2. The Law	162
	3. Questions	164
	B. Section 311 of the Clean Water Act	164
	C. Other Laws	165
	D. Preemption	165
IV.	Regulatory Changes	168
	A. Agencies	168
	1. ONRR	168
	2. BOEM & BSEE	169
	B. New Regulations	169
	1. The Drilling Safety Rule	170
	2. The Workplace Safety Rule	171
V.	Changes on the Horizon	172
	A. SEMS II	172
	B. Blowout Preventer Rules	173
	C. National Pollutant Discharge Elimination System	173
VI.	Conclusion	174

I. INTRODUCTION

Environmental issues of the offshore oil and gas industry are as broad and varied as the ocean where these activities occur. The parties involved include lessees; owners and operators of vessels, facilities, and mobile offshore drilling units (MODU); cargo owners; oil traders; technology and service providers; federal and state agencies; shareholders; third parties; and others.² The issues intersect different areas of the law, including litigation, regulatory and administrative law, transactional issues, and crisis and risk manage-

1 Opinions expressed herein are those of the author, and not those of Erskine & Blackburn L.L.P. or any of its partners or employees.

2 See ADAM VANN, CONG. RESEARCH SERV., RL33404, OFFSHORE OIL AND GAS DEVELOPMENT: LEGAL FRAMEWORK (2010).

ment.³ The numerous statutes and regulations are complex and swiftly changing.⁴ Affected industries and lawyers must stay attuned and respond quickly to changes to ensure continued compliance with the requirements. This is no small task. As the Secretary of the United States Department of Interior (DOI) noted, changes in the regulation of offshore drilling over the past two years constitute the “largest overhaul in American history.”⁵

The impetus for many of the recent changes was the explosion and release of oil from the Macondo prospect being drilled by the MODU Deepwater Horizon in the Gulf of Mexico on April 20, 2010 (the Macondo Incident).⁶ The explosion resulted in 11 deaths, several injuries, and a large subsurface discharge of oil.⁷ Within 24 hours of the explosion, the United States Coast Guard, the Department of Homeland Security, Department of Commerce, DOI, National Oceanic Atmospheric Administration, and Environmental Protection Agency (EPA), as well as state and local governmental authorities, were involved in the response to the explosion.⁸ Some of the major regulatory changes since the Macondo Incident are discussed in Section IV of this paper.

The offshore oil and gas industry is also subject to a complex web of potential liability, in particular if there is a release or potential release of oil. There are numerous laws that apply a variety of penalties and provide for damages and recovery of costs if a release occurs.⁹ The typical vehicle for liability is the Oil Pollution Act of 1990 (OPA 90).¹⁰ It is supplemented by many other federal and state laws.¹¹ Section III discusses the liability scheme.

II. ECONOMIC BACKGROUND

Although this paper focuses on the legal consequences of the liability structure and changes to the regulatory scheme, there is also an important interplay between the legal issues and economic impacts. A recent report by the Southern Methodist University Cox Maguire Energy Institute addresses the state of offshore drilling from this perspective.¹² The author found that there is a “regulatory risk premium” impacting the eco-

3 See *id.*

4 See *id.*

5 *America's Energy Future - Q&A Recorded Live with Secretary Salazar*, U.S. DEPARTMENT OF INTERIOR (Feb. 3, 2012), <http://www.doi.gov/news/video/Americas-Energy-Future-QA-recorded-live-with-Secretary-Salazar.cfm>.

6 See NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, *DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING* xiii (2011) (providing the details of the April 20, 2010 Macondo Incident).

7 *Id.* at vi.

8 *Id.* at 131.

9 See *infra* Part III.

10 See *infra* Part III.A.

11 See *infra* Part III.B–C.

12 See BERNARD L. WEINSTEIN, S. METHODIST UNIV. COX MAGUIRE ENERGY INST., *THE OUTLOOK FOR ENERGY PRODUCTION IN THE U.S. GULF OF MEXICO: HOW THE REGULATORY RISK PREMIUM IS RESTRAINING PRODUCTION* (2012), available at <http://www.noia.org/web site/download.asp?id=53442>.

nomics of offshore drilling.¹³ The report posits that this is due, in part, to issues with the permitting process.¹⁴ According to government reports, the number of permits issued since April 2010 has increased; however, this does not necessarily equate to increased operations.¹⁵ In fact, a large percentage of these permits are re-approvals of exploration plans and development plan approvals issued prior to the Macondo Incident.¹⁶ For new permits, the approval takes considerably longer than it did before the Macondo Incident.¹⁷ The time between one period of the process, the time between “deemed submission,” and approval, has returned to normal.¹⁸ However, the time between when the operator first submits an application until it is deemed submitted has tripled.¹⁹ Thus, the overall time to issue a permit is significantly longer than it was prior to 2010.²⁰ Finally, while the number of MODUs in the Gulf of Mexico (as of May 2012) is near the levels that existed before the Macondo Incident, only a portion of these are engaged in drilling-related activities.²¹ Thus, it appears the offshore oil and gas industry is still in recovery mode.

This paper addresses two issues that may be influencing the regulatory risk premium: (1) expansive and complex liability, and (2) changes to the statutory and regulatory scheme.

III. LIABILITY FOR RELEASES

A. OIL POLLUTION ACT OF 1990

1. BACKGROUND

OPA 90 was enacted in the shadow of a previous oil spill.²² In March of 1989, the Exxon Valdez grounded in the Prince William Sound, rupturing eight of its eleven cargo tanks and spewing more than 10 million gallons of crude oil.²³ The liability related to the release was governed by a number of laws, including the Clean Water Act (CWA)²⁴ and maritime law.²⁵ At the time, many potential claimants were unable to recover for their losses under a bright line rule (the *Robins Dry Dock* rule), which precluded recovery under maritime law for economic losses absent physical damage.²⁶ There were also concerns about the ability to adequately respond to and address spills. In response to

13 *Id.* at 3.

14 *Id.* at 10–11.

15 *See id.* at 7.

16 *Id.* at 8.

17 *Id.* at 9–10.

18 *Id.*

19 *Id.* at 9.

20 *See id.* at 9–10.

21 *Id.* at 7–8.

22 *Oil Pollution Act Overview*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oem/content/lawsregs/opaover.htm> (last updated Jan. 28, 2011).

23 ALA. OIL SPILL COMM'N, *SPILL: THE WRECK OF THE EXXON VALDEZ* 5 (1990).

24 *See* Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).

25 *See In re Exxon Valdez*, 270 F.3d 1215 (9th Cir. 2001).

26 *See Robins Dry Dock & Repair Co. v. Flint*, 275 U.S. 303, 308 (1927).

these and other concerns, Congress enacted OPA 90 to clarify and expand liability for any discharge or threat of discharge of oil into or upon navigable waters or adjoining shorelines.²⁷ It includes coverage of purely economic losses and sets up a scheme of strict, joint and several liability for each responsible party (RP).²⁸

2. THE LAW

The scope of OPA 90 is broad. It applies to vessels, offshore facilities, onshore facilities, and pipelines located in, or operating in, on, or under the navigable waters of the United States or subject to the jurisdiction of the United States.²⁹ Under OPA 90, if there is a release, the named RP is responsible for responding to the incident, receiving and responding to claims, and a host of other tasks.³⁰ The definition of RP varies based on the type of vessel or facility involved in an incident.³¹ For a vessel, the RP is “any person owning, operating, or demise chartering the vessel.”³² For an offshore facility, the RP is “the lessee or permittee of the area in which the facility is located or the holder of a right of use and easement granted under applicable state law or the Outer Continental Shelf Lands Act” (OCSLA).³³ The RP for an onshore facility is “any person owning or operating the facility.”³⁴ MODUs are treated as both tank vessels and offshore facilities under OPA 90.³⁵ For pipelines, the RP is a person who owns or operates the pipeline.³⁶

Under OPA 90, the RP is liable for removal costs incurred by government or private parties,³⁷ and for the following damages and costs of assessing damages:

- (1) damages for injury to, destruction of, loss of, or loss of use of, natural resources;
- (2) injury to, or economic losses resulting from destruction of real or personal property;
- (3) loss of subsistence use of natural resources;
- (4) net loss of taxes, royalties, rents, fees, or net profits due to the damages to real property, personal property, or natural resources;
- (5) loss of profits or impairments of earning capacity due to damages to real property, personal property, or natural resources; and

27 See Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat 484 (codified as amended at 33 U.S.C. §§ 2701-2761 and 26 U.S.C. §§ 4611, 9509, as well as other scattered provisions in U.S.C.); Lawrence I. Kiern, LIABILITY, COMPENSATION, AND FINANCIAL RESPONSIBILITY UNDER THE OIL POLLUTION ACT OF 1990: A REVIEW OF THE FIRST DECADE, 24 TUL. MAR. L.J. 481, 482 (2000).

28 Oil Pollution Act of 1990, 33 U.S.C. § 2702 (2012); see also GMD Shipyard Corp. v. M/V Anthhea Y, 2004 WL 2251670, at *14, n.3 (S.D.N.Y. Oct. 6, 2004).

29 33 U.S.C. § 2702.

30 *Id.*

31 *Id.* § 2701(32).

32 *Id.* § 2701(32)(A).

33 *Id.* § 2701(32)(C).

34 *Id.* § 2701(32)(B).

35 See *id.* §§ 2701(18), 2704(b).

36 *Id.* § 2701(32)(E).

37 *Id.* § 2702(b)(1). Private parties can recover removal costs only for acts consistent with the National Contingency Plan. § 2702(b)(1)(B).

- (6) net costs of providing increased or additional public services during or after removal activities.³⁸

OPA 90 includes a tiered limit on an RP's liability, which varies based on the type of facility or vessel involved in the incident.³⁹ The maximum liability cap is currently set at \$75 million for damages, with no limit on the RP's liability for removal costs.⁴⁰ OPA 90 provides that a MODU is treated as a tank vessel, up to the limit on liability for tank vessels.⁴¹ Thus, the owner or the operator of the MODU itself is liable for up to the first \$23,496,000 in removal costs and damages.⁴² If costs exceed that amount, then the MODU is treated as an offshore facility, and the lessee becomes the RP for the excess damages and removal costs.⁴³

The statutory limit on liability for damages does not apply if: (1) the release was caused by gross negligence, willful misconduct, or "the violation of an applicable Federal safety, construction, or operating regulation by the responsible party, an agent or employee of the responsible party, or a person acting pursuant to a contractual relationship with the responsible party";⁴⁴ (2) the RP fails to report the discharge;⁴⁵ or (3) the RP fails to cooperate with or abide by the orders of officials regarding removal activities.⁴⁶

There are defenses available, such as an act of God, an act of war, or an act or omission of a third party, other than an employee or agent of the RP or a third party whose act or omission occurs in connection within a contractual relationship with the RP.⁴⁷ As with the limit on liability, the defenses are limited. For example, an RP cannot claim the statutory defenses if the RP fails to: (1) report the incident, if the RP knows or has reason to know of the incident; or (2) provide all reasonable cooperation and assistance to the responsible official for removal activities, or comply with an order issued under § 1321(c) or (e) of the Intervention on the High Seas Act.⁴⁸ If the discharge is related to an event that occurred prior to an RP's acquisition of ownership, there is also a defense for an "innocent landowner."⁴⁹ To qualify, a potential purchaser must comply with strict requirements, including compliance with an all appropriate inquiries standard.⁵⁰

Finally, even if an RP qualifies for a defense, or is otherwise entitled to recover from a third party, it may still be required to pay all of the damages and claims upfront.⁵¹ It

38 *Id.* § 2702(b)(2).

39 *Id.* § 2704.

40 *Id.* § 2704(a)(3).

41 *Id.* § 2704(b)(1) (2012).

42 U.S. DEP'T OF HOMELAND SECURITY, OIL POLLUTION ACT LIABILITY LIMITS IN 2012, at 15 (2012), available at http://www.uscg.mil/npfc/docs/PDFs/Reports/Liability_Limits_Report_2012.pdf. The maximum amount could be less, depending upon the size of the MODU. See 33 U.S.C. § 2704(a) (2012).

43 33 U.S.C. § 2704(b)(2).

44 *Id.* § 2704(c)(1).

45 *Id.* § 2704(c)(2)(A).

46 *Id.* § 2704(c)(2)(B), (C).

47 *Id.* § 2703(a).

48 *Id.* § 2703(c).

49 *Id.* §§ 2703(d)(1)(B), (d)(2); 33 C.F.R. §§ 137.1-.85 (2012).

50 33 U.S.C. § 2703(d)(4).

51 See *id.* § 2705(a), (b)(5).

can seek recovery from a third party or the fund later, but in the case of a major incident, an RP may expend millions (or even billions) before it can recover from other parties.⁵²

There have been attempts to modify OPA 90 in the past two years, including several bills introduced to remove the limits on liability for an RP of an offshore facility, but these efforts have had little success to date.⁵³ The primary change since April 2010 is that OPA 90 was expanded to include liability for cargo owners in some limited circumstances.⁵⁴

3. QUESTIONS

OPA 90 did not resolve every issue in the realm of offshore liability. Questions still persisted, such as what laws apply when state waters are impacted, what constitutes an “operator,” and the scope of other vague definitions (e.g., “vessel”). There are only a handful of cases addressing preemption issues. These are discussed in Section III.D. below.

With respect to definitions, the case law is lacking. There is, however, at least one district court that has considered the term “operator.”⁵⁵ That court adopted the rule used under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) that operators are persons who “manage, direct, or conduct the operations specifically related to pollution.”⁵⁶ This suggests that existing CERCLA case law may help delineate what actions are considered “operating” a vessel or facility for purposes of being an RP under OPA 90.

B. SECTION 311 OF THE CLEAN WATER ACT

With the enactment of OPA 90, Congress also amended CWA § 311.⁵⁷ This section provides liability for removal costs related to the discharge of a harmful amount of oil or hazardous substances into or upon navigable waters of the United States, adjoining shorelines, or into or upon the water of the contiguous zone, or which may affect the natural resources of the United States.⁵⁸ EPA presumes a discharge of oil to be harmful if the discharge: (1) violates applicable water quality standards; (2) causes a film of sheen or discoloration on the surface of the water or adjoining shorelines; or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.⁵⁹

The RPs are the owners and operators of vessels and offshore facilities.⁶⁰ Such RPs are liable for the costs of removal and mitigation of damages.⁶¹ Much of the CWA

52 See *id.*

53 See, e.g., Big Oil Bailout Prevention Act of 2011, H.R. 492, 112th Cong. (2011).

54 See Coast Guard Authorization Act of 2010, Pub. L. No. 111-281, § 713, 124 Stat 2905, 2988 (2010) (codified at 33 U.S.C. § 2701(32)(A)).

55 See *Harris v. Oil Reclaiming Co.*, 94 F.Supp.2d 1210, 1213 (D. Kan. 2000).

56 *Id.*

57 OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE, U.S. ENVTL. PROT. AGENCY, CIVIL PENALTY POLICY FOR SECTION 311(B)(3) AND SECTION 311(J) OF THE CLEAN WATER ACT 1 (1998), available at www.epa.gov/enforcement/water/documents/policies/311pen.pdf.

58 33 U.S.C. §§ 1321(b)(3), (f)(1)–(4) (2012).

59 40 C.F.R. § 110.3 (2012).

60 33 U.S.C. § 1321(f).

61 *Id.* § 1321(b)(9)–(10).

appears to overlap with recoveries available under OPA 90; however, unlike OPA 90, there is no private right of action under the CWA.⁶² The CWA also provides for civil, administrative, and criminal penalties.⁶³

C. OTHER LAWS

Numerous other laws may also be implicated by a release of oil. For example, if the release violates certain regulations or permit conditions, if employees are injured or killed, or if the release results in the take of endangered species, the following may apply: the OCSLA,⁶⁴ the Refuse Act,⁶⁵ the Death on the High Seas Act,⁶⁶ the Endangered Species Act,⁶⁷ and the Marine Mammal Protection Act.⁶⁸ These are just a handful of the potential laws and issues that may be triggered by a release of oil. Other potential claims include liability for injuries alleged to be the result of chemical dispersants used to respond to oil releases.

Where an incident occurs, what causes it, and what resources are impacted are key factors in determining which federal laws may apply. In addition, separate state laws and common law may apply. Whether these laws are preempted by OPA 90 or otherwise is a separate consideration.

D. PREEMPTION

OPA 90 stipulates that it does not affect, and shall not be construed “to affect, the authority of the United States or any State or political subdivisions thereof— (1) to impose additional liability or additional requirements; or (2) to impose . . . any fine or penalty . . . for any violation of law; relating to the discharge, or substantial threat of a discharge, of oil.”⁶⁹ Taken literally, this provision indicates that entities facing liability under OPA 90 could also face liability under other federal or state laws or regulations. Additionally, two federal district courts have held that OPA 90 does not preempt claims brought under other federal statutes, even though the claims involve the same underlying incidents.⁷⁰

62 See, e.g., *Middlesex Cnty. Sewerage Auth. v. Nat'l Sea Clammers Ass'n*, 453 U.S. 1, 14–15 (1981).

63 33 U.S.C. §§ 1319, 1321.

64 Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331–1356(a) (2012).

65 Refuse Act, 33 U.S.C. § 407 (2012).

66 Death on the High Seas Act, 46 U.S.C. § 30302 (2012).

67 Endangered Species Act, 16 U.S.C. §§ 1531–1544 (2012).

68 Marine Mammal Protection Act, 16 U.S.C. §§ 1361–1423(h) (2012).

69 Oil Pollution Act of 1990, 33 U.S.C. § 2718(c) (2012).

70 *United States v. M/V Cosco Busan*, 557 F.Supp.2d 1058, 1063 (N.D. Cal. 2008) (holding that “OPA contains an unambiguous savings clause that expressly preserves the authority of the United States to impose liability pursuant to statutes other than OPA”); *United States v. Egan Marine Corp.*, 2009 WL 855964, *2–3 (N.D. Ill. 2009) (arguing same).

Recent decisions regarding state law reached a different conclusion.⁷¹ These decisions were issued in the litigation following the Macondo Incident.⁷² Several states made claims in these lawsuits alleging, among other things, past, present, and future damages, including damages to natural resources and property, economic losses, and penalties under OPA 90, maritime law, and separate state laws.⁷³

Under separate orders addressing motions to dismiss the states' claims, the Eastern District of Louisiana examined the issue of preemption.⁷⁴ Ultimately the court found that claims of negligence and products liability under general maritime law (including the availability of punitive damages) were not preempted by OPA 90.⁷⁵ Notwithstanding, the court held that the states' requests for damages and penalties under state statutes were preempted by OPA 90 and the CWA.⁷⁶ In those orders, the District Court cited the Supreme Court's opinion in *International Paper Co. v. Ouellette*, 479 U.S. 481 (1987), to support its finding that the state claims are preempted by federal law.⁷⁷ In *Ouellette*, Vermont property owners sued a New York paper mill under Vermont nuisance law for discharging pollutants to waters that flowed from New York into Vermont.⁷⁸ The Court in *Ouellette* held that the CWA preempts a common law nuisance suit that applies the law of the affected state (*i.e.*, Vermont) but does not preempt a common law nuisance suit that applies the law of the source state (New York).⁷⁹ The Supreme Court supported its decision with a discussion of Congress's intent, in enacting the CWA and 1972 amendments, to create a comprehensive federal mechanism to regulate water pollution.⁸⁰

71 See *In re Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mex.*, on Apr. 20, 2010 (Order of Aug. 26, 2011), 808 F.Supp.2d 943, 968–969 (E.D. La. 2011) (order addressing motions to dismiss claims for “non-governmental economic loss and property damages”); *In re Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mex.*, on Apr. 20, 2010 (Order of Nov. 14, 2011) MDL No. 2179, 2011 WL 5520295, at *3–6 (E.D. La. Nov. 14, 2011) (order addressing motions to dismiss claims by States of Alabama and Louisiana). *In re Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010* is a multi-district litigation consisting of hundreds of consolidated cases arising from Macondo Incident, which has been organized into several pleading bundles based on the type of claim. Order of Aug. 26, 2011, 808 F.Supp.2d at 947.

72 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 947; Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *1.

73 Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *1–2.

74 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 958–969; Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *3–6.

75 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 962–963; Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *3.

76 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 956–957; Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *3–6.

77 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 956–957 (citing *Int'l Paper Co. v. Ouellette*, 479 U.S. 481 (1987)); Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *3–6 (citing *Ouellette*, 479 U.S. 481 (1987)).

78 *Ouellette*, 479 U.S. at 481.

79 *Id.* at 488–492.

80 *Id.* at 492–497.

Applying the logic of *Ouellette*, the Eastern District Court held that the CWA and OPA 90 preempt claims for recovery and damages that are based on the laws of affected states.⁸¹ The court explored the parallels between the Vermont landowners' nuisance suit against the New York paper mill and the State of Louisiana's claims for recovery for the Deepwater Horizon spill under Louisiana state law.⁸² Like the New York paper mill in *Ouellette*, the court noted that the RP in the Macondo Incident was regulated under a national pollution discharge elimination system (NPDES) permit.⁸³ Thus, discharges by the Deepwater Horizon, like discharges by the paper mill, are regulated under the federal CWA.⁸⁴ The court applied the reasoning from *Ouellette* and, consistent with that decision, found that Louisiana was preempted from applying state law to recover for pollution originating outside the affected state.⁸⁵

The Eastern District Court also discussed in some detail why the savings clauses in the CWA and OPA 90 did not "save" the affected states' claims under state law.⁸⁶ In particular, CWA § 311(o)(2) allows states, despite the CWA, to impose requirements or additional liability "with respect to the discharge of oil . . . into any water within such State."⁸⁷ The court emphasized, however, that this provision is restricted to discharges that occur within the affected state.⁸⁸ Therefore, because the discharge of oil occurred in federal waters and not within Louisiana, the CWA savings clause is inapplicable.⁸⁹ Furthermore, the court held that the savings clause in OPA 90 did not apply because CWA § 311(o)(2) and OPA 90 § 2718 conflict.⁹⁰ The court noted that "the CWA controls in this instance because it is the more specific statute; i.e., the CWA contains penalties for discharges."⁹¹

State law may still play a role in future analyses. The court acknowledged that its decisions did *not* conclude that state law could never apply to conduct outside of state waters.⁹² There are many reasons a state may wish to seek recovery under its own statutes as opposed to OPA 90. The state's oil pollution laws may include additional types of damages, higher (or no) limits on damages, or a broader definition of RP. For example, the Texas Oil Spill Prevention and Response Act of 1991 (TX-OSPR) does not

81 Order of Aug. 26, 2011, *supra* note 71, 808 F.Supp.2d at 951–958; Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *3–6.

82 Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *5. Alabama made similar requests for recovery under Alabama law. *Id.* The court found both states' claims were preempted. *Id.*

83 *Id.*

84 *Id.*

85 *Id.*

86 See Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *5–6.

87 33 U.S.C. § 1321(o)(2) (2012). According to the Fifth Circuit, CWA Section 311(o)(1) "should not affect or modify the remedies of any private or public party, including the government, to recover for actual damage to property from an oil spill." *United States v. Dixie Carriers, Inc.*, 627 F.2d 736, 742 (5th Cir. 1980).

88 Order of Nov. 14, 2011, *supra* note 71, 2011 WL 5520295, at *5–6.

89 *Id.* at *5.

90 *Id.* at *6.

91 *Id.* at *6.

92 *Id.* at *3 note 15.

limit liability for offshore drilling facilities⁹³ and has a broader definition of an RP. “Responsible person” includes owners and operators of vessels or facilities and “any person who causes, allows, or permits an unauthorized discharge of oil or threatened unauthorized discharge of oil.”⁹⁴ In addition to unlimited liability for damages and response costs, TX-OSPRAs includes penalties of up to three times the costs incurred as a result of the discharge.⁹⁵

IV. REGULATORY CHANGES

A. AGENCIES

Less than one month after the Macondo Incident, DOI Secretary Salazar issued an order dividing the Mineral Management Service (MMS), the agency charged with the majority of offshore oil and gas regulation, into three separate agencies: Office of Natural Resource Revenue (ONRR), Bureau of Ocean Energy Management (BOEM), and Bureau of Safety and Environmental Enforcement (BSEE).⁹⁶

1. ONRR

Effective immediately upon the order, the ONRR was split from MMS and moved into the organization of the Assistant Secretary for Policy, Management and Budget.⁹⁷ The ONRR manages revenue from traditional and renewable offshore energy resources, including auditing functions and enforcement regarding reporting and payment of royalties.⁹⁸ Since the agency began as part of MMS in 1982, it has collected more than \$48 million in civil penalties.

There are signals that, since ONRR has separated, it is increasing its enforcement efforts. In fiscal year 2012, the ONRR collected civil penalties of more than \$7.2 million.⁹⁹ This is more than triple the previous yearly averages.¹⁰⁰ Increased enforcement with respect to penalties may be an ongoing trend in the future.

93 TEX. NAT. RES. CODE ANN. § 40.202(b) (West 2012).

94 *Id.* § 40.003(20) (emphasis added).

95 *Id.* § 40.251(d) (A person responsible for the discharge that does not abate, contain, or remove the pollution, is liable for penalties of \$25,000 per day the discharge is not abated, contained or removed, or not more than three times the costs incurred by the fund established under TX-OSPRAs.).

96 DEP'T OF THE INTERIOR, SECRETARIAL ORDER NO. 3299, ESTABLISHMENT OF THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, AND THE OFFICE OF NATURAL RESOURCES REVENUE (May 19, 2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=32475>.

97 *Id.*

98 *Id.*

99 *Penalty Collections FY 2012*, OFFICE OF NAT. RESOURCES REVENUE, <http://www.onrr.gov/CivilPenalties/pdfs/2012.pdf> (last visited May 17, 2013).

100 *Compare Penalty Collections FY 2012*, OFFICE OF NAT. RESOURCES REVENUE, <http://www.onrr.gov/CivilPenalties/pdfs/2012.pdf> with *Penalty Collections FY 2011*, OFFICE OF NAT. RESOURCES REVENUE, <http://www.onrr.gov/CivilPenalties/pdfs/2011.pdf>, and *Penalty*

2. BOEM & BSEE

The remaining functions of the prior MMS were vested temporarily with the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE).¹⁰¹ This agency managed the leasing, permitting, and enforcement functions until these functions could be further divided into two separate agencies.¹⁰² During the interim period, BOEMRE continued to operate, issuing permits, notices, and new regulations.¹⁰³ One year later, the agency was further divided into BOEM and BSEE.¹⁰⁴

BOEM, led by Director Beaudreau, is in charge of leasing and air quality compliance, including “plan administration, environmental studies, National Environmental Policy Act (NEPA) analysis, resource evaluation, economic analysis and the offshore renewable energy program.”¹⁰⁵

BSEE, initially led by former Director Bromwich, is charged with permitting, inspections, oil spill response, and the training and environmental compliance duties.¹⁰⁶ In December 2011, James Watson was named as the new director.¹⁰⁷ Director Watson previously served as the Federal On-Scene Coordinator for the government-wide response to the Macondo Incident.¹⁰⁸

B. NEW REGULATIONS

When the functions were split between BOEM and BSEE, so too were the regulations. The rules that apply to BSEE matters remained in 30 C.F.R. Chapter II, but the

Collections FY 2010, OFFICE OF NAT. RESOURCES REVENUE, available at <http://www.onrr.gov/CivilPenalties/pdfs/2010.pdf> (showing yearly totals).

101 DEP’T OF THE INTERIOR, SECRETARIAL ORDER NO. 3302, CHANGE OF THE NAME OF THE MINERALS MANAGEMENT SERVICE TO THE BUREAU OF OCEAN ENERGY MANAGEMENT REGULATION AND ENFORCEMENT (June 18, 2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=35872>.

102 *Id.*

103 See DEP’T OF THE INTERIOR, IMPLEMENTATION REPORT, REORGANIZATION OF THE MINERALS MANAGEMENT SERVICE (2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=38543%20>.

104 Salazar, *Bromwich Announce Next Steps in Overhaul of Offshore Energy Oversight and Management*, DEP’T OF THE INTERIOR (Jan. 19, 2011), <http://www.doi.gov/news/pressreleases/Salazar-Bromwich-Announce-Next-Steps-In-Overhaul-of-Offshore-Energy-Oversight-and-Management.cfm>; see also *The Reorganization of the Former MMS*, BUREAU OF OCEAN ENERGY MGMT., <http://www.boem.gov/About-BOEM/Reorganization/Reorganization.aspx> (last visited May 22, 2013).

105 Tommy Beaudreau, *Director*, BUREAU OF OCEAN ENERGY MGMT., <http://www.boem.gov/About-BOEM/BOEM-Leadership/Director-Bio.aspx> (last visited May 22, 2013).

106 Secretary Salazar Names Michael R. Bromwich and Tommy P. Beaudreau to Lead New DOI Bureaus, DEP’T OF THE INTERIOR (Sept. 16, 2011), <http://www.doi.gov/news/pressreleases/Secretary-Salazar-Names-Michael-R-Bromwich-and-Tommy-P-Beaudreau-to-Lead-New-DOI-Bureaus.cfm>.

107 James Watson, *Director*, BUREAU OF SAFETY & ENVTL. ENFORCEMENT, <http://www.bsee.gov/About-BSEE/BSEE-Leadership/Director-Bio.aspx> (last visited May 22, 2013).

108 *Id.*

rules for BOEM were moved to 30 C.F.R. Chapter V.¹⁰⁹ New substantive requirements have been added as well, including the Drilling Safety Rule and the Workplace Safety Rule on Safety and Environmental Management Systems.¹¹⁰

1. THE DRILLING SAFETY RULE

The Drilling Safety Rule impacts permit applications and drilling.¹¹¹ This rule implements recommendations from the May 27, 2010 report from DOI to the President, “Increased Safety Measures for Energy Development on the Outer Continental Shelf,”¹¹² which was developed as a result of the Macondo Incident.¹¹³ The report includes a series of recommendations designed to make drilling on the Outer Continental Shelf safer and decrease the likelihood of a future release of oil.¹¹⁴ The rule is intended to strengthen drilling standards.¹¹⁵

Among the new obligations, the rule requires a professional engineer to independently certify that the casing and cementing program is appropriate for the purpose for which it is intended under expected wellbore pressure.¹¹⁶ The rule also incorporates new standards for well design, casing, and cementing, and mandates the American Petroleum Institute’s (API’s) recommended practice 65—Part 2 (RP 65-2).¹¹⁷ RP 65-2 addresses the isolation of potential flow zones during well construction.¹¹⁸ Agency involvement in the process is also increased. For example, the rule requires BSEE approval to switch from heavy drilling fluid to light drilling fluids.¹¹⁹

The Drilling Safety Rule was proposed as an interim rule and the public comment period remained open for 60 days.¹²⁰ BSEE published the final rule on August 22, 2012.¹²¹ The final rule makes several changes and clarifications to the interim rule, including: (i) clarifications to the requirements related to mechanical barriers; (ii) limits

109 Reorganization of Title 30: Bureaus of Safety and Environmental Enforcement and Ocean Energy Management, 76 Fed. Reg. 64,432 (Oct. 18, 2011) (to be codified at 30 C.F.R. ch. V).

110 See Oil and Gas and Sulphur Operations on the Outer Continental Shelf—Increased Safety Measures for Energy Development on the Outer Continental Shelf, 77 Fed. Reg. 50856 (Aug. 22, 2012) (to be codified at 30 C.F.R. pt. 250); Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Safety and Environmental Management Systems, 75 Fed. Reg. 63610 (Oct. 15, 2010).

111 See 77 Fed. Reg. 50,856 (Aug. 22, 2012).

112 *Id.* at 50,856.

113 *Id.* at 50,857.

114 *Id.*

115 *Id.*

116 30 C.F.R. §§ 250.418(h), 250.420(a)(6) (2012).

117 *Id.* § 250.198(h)(78).

118 API Standard 65—Part 2, *Isolating Potential Flow Zones During Well Construction*, AM. PETROLEUM INSTITUTE (2d ed., Dec 2010), http://www.api.org/~media/Files/Policy/Exploration/Std_65_2_e2.pdf.

119 30 C.F.R. § 250.456(j) (2012).

120 Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Increased Safety Measures for Energy Development on the Outer Continental Shelf, 75 Fed. Reg. 63,346 (proposed Oct. 14, 2010).

121 77 Fed. Reg. 50,856 (Aug. 22, 2012).

to the types of wells on which the operator is required to perform a negative pressure test; and (iii) addition of a new requirement that an operator must have two barriers in place before removing the blowout preventer, and BSEE may require more than two barriers.¹²²

2. THE WORKPLACE SAFETY RULE

The Workplace Safety Rule on Safety and Environmental Management Systems, commonly referred to as the SEMS rule, was finalized shortly after the Macondo Incident.¹²³ However, this rule was not entirely a reaction to the incident. The SEMS rule had been under consideration earlier.¹²⁴ The MMS proposed a version in 2009, although that version contained far fewer requirements.¹²⁵ It consisted of four elements—Hazards Analysis, Management of Change, Operating Procedures, and Mechanical Integrity.¹²⁶ This early version of the rule was not finalized and, ultimately, it was replaced with the current version of the SEMS rules published on October 15, 2010.¹²⁷

The final rule made all 13 elements of API's recommended practice 75 (RP 75) mandatory and added other stringent requirements.¹²⁸ For example, the rule requires that the operator enter a bridging document with contractors regarding the parties' understanding of the operator's SEMS program.¹²⁹ With respect to audits, the rule includes requirements to use an "independent third party" or "designated qualified personnel" as the auditor.¹³⁰ The operator is required to notify BSEE 30 days prior to conducting the audit regarding the scope of the audit and the identity of the "nominated" auditor.¹³¹ Prior to the audit, BSEE can reject the nominated auditor, and BSEE can require other changes to the audit plan, such as modification to the proposed facility list.¹³² BSEE also has the option to participate in the audit.¹³³ An audit report is due within 30 days following completion of an audit, and corrective action must be completed within 30 days of submittal of the report.¹³⁴

The agency has a number of options for addressing alleged noncompliance with the new SEMS rules. Depending on the alleged violation, it may seek civil penalties, issue

122 *Id.* at 50,857–58.

123 Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Safety and Environmental Management Systems, 75 Fed. Reg. 63,610 (Oct. 15, 2010) (to be codified at 30 C.F.R. pt. 250).

124 See Safety and Environmental Management Systems for Outer Continental Shelf Oil and Gas Operations, 74 Fed. Reg. 28,639 (proposed June 17, 2009).

125 See *id.*

126 *Id.* at 28,640–41.

127 See 75 Fed. Reg. 63,610.

128 See BUREAU OF OCEAN ENERGY MANAGEMENT, FACT SHEET: THE WORK PLACE SAFETY RULE ON SAFETY AND ENVIRONMENTAL MANAGEMENT SYSTEMS, available at <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=45791> (last visited February 3, 2013).

129 30 C.F.R. § 250.1914 (2012).

130 *Id.* § 250.1920(a).

131 *Id.* § 250.1920(b).

132 *Id.*

133 *Id.*

134 *Id.* § 250.1920(c), (d).

component or facility shut-in orders, or seek probation or disqualification of an operator.¹³⁵

The rule became effective on November 15, 2010, but operators were given until November 15, 2011 to comply with the SEMS requirements.¹³⁶ Due to the extended deadline for compliance, SEMS audits have only recently begun. BSEE intends to expand these compliance audits as the SEMS II rule, discussed later, is finalized.¹³⁷ Thus, the full impact of the new rule has yet to be fully realized.

V. CHANGES ON THE HORIZON

The industry has been working to stay current with the new rules and guidance issued over the last two years and the pace is not slowing. Additional SEMS rules, new requirements for blowout preventers, permitting changes, and potential legislative changes are still on the horizon.

A. SEMS II

Approximately a year after the initial SEMS rule was issued, BSEE proposed SEMS II.¹³⁸ The rule adds new requirements and makes existing requirements more stringent.¹³⁹ SEMS II eliminates the option to use designated qualified personnel to perform the required audits.¹⁴⁰ This may lead to a shortage of auditors because the rule already disqualifies auditors who helped prepare the operator's SEMS program.¹⁴¹ Eliminating the use of designated qualified personnel will further narrow the pool of potential qualified candidates to conduct audits.

The SEMS rule and the SEMS II rule do not expressly provide an extension of time if BSEE rejects the auditor an operator has nominated.¹⁴² Therefore, operators may need to submit nominations of auditors much earlier than the 30 days prior to the audit required by the rule. Operators need to allow time to make alternate arrangements if BSEE rejects a nomination. The first SEMS audits must be completed by November 13, 2013.¹⁴³ If operators do not complete audits by this date, they may be subject to enforcement,¹⁴⁴ as discussed in the previous section. SEMS II became effective June 4, 2013.

135 *Id.* § 250.1927.

136 *Id.* § 250.1900(a).

137 BUREAU OF SAFETY AND ENVTL. ENFORCEMENT, DEP'T OF THE INTERIOR, BUDGET JUSTIFICATIONS AND PERFORMANCE INFORMATION, FISCAL YEAR 2013, at 36–37 (2012), available at http://www.doi.gov/budget/appropriations/2013/upload/FY2013_BSEE_Greenbook.pdf.

138 Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Revisions to Safety and Environmental Management Systems, 76 Fed. Reg. 56,683 (proposed Sept. 14, 2011) (to be codified at 30 C.F.R. pt. 250).

139 *Id.* at 56,684–85.

140 *Id.* at 56,685.

141 See 30 C.F.R. § 250.1926(b).

142 See § 250.1926(c); 76 Fed. Reg. 56,683.

143 See 30 C.F.R. § 250.1920 (“You must have your SEMS program audited . . . within 2 years of the initial implementation of the SEMS program”).

144 *Id.* § 250.1927.

Operators have one year to comply with the new SEMS II requirements, except that operators will be able to conduct audits under the first SEMS rule until June 5, 2015.

Other notable changes in SEMS II are the expected requirement that all employees and personnel, including contractors, have stop work authority for any activity under BSEE jurisdiction, new rules regarding “Ultimate Work Authority,” and a requirement that operators have a plan of action showing how employees are involved in implementing the SEMS plan.¹⁴⁵ The comment period on this rule closed November 14, 2011, and the rule was finalized on April 15, 2013.¹⁴⁶

B. BLOWOUT PREVENTER RULES

The director of BSEE announced that the agency “will be proposing new rules for how blowout preventers are designed, how they must perform and how they must be maintained over their lifespans.”¹⁴⁷ The original plan to develop these rules was to issue an advance notice of proposed rulemaking but instead, DOI and BSEE are pursuing a faster path to develop the new regime for blowout preventers (BOPs).¹⁴⁸ The DOI hosted a BOP forum in May 2012, and invited stakeholders to provide input on BOPs.¹⁴⁹ Deputy Secretary of the Interior Hayes stated that there are at least four things he is looking for in a proposed rule:

- (1) BOPs need to be able to cut whatever is in their way and completely seal off the well;
- (2) there should be a safety net for BOPs;
- (3) BOPS need better sensors to indicate what is happening at the bottom of the sea; and
- (4) additional training should be required for anyone working with BOPs.¹⁵⁰

The proposed BOP rule is anticipated soon.¹⁵¹

C. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The current National Pollutant Discharge Elimination System (NPDES) permit for New and Existing Sources in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category for the Western Portion of the Outer Continental Shelf of the

145 76 Fed. Reg. 56,683, 56,692–94.

146 Oil and Gas and Sulphur Operations in the Outer Continental Shelf-Revisions to Safety and Environmental Management Systems, 78 Fed. Reg 20,423 (Apr. 4, 2013) (to be codified at 30 C.F.R. pt. 250).

147 James A. Watson, *The Lessons We Learned from Deepwater Disaster*, HOUSTON CHRONICLE (Apr. 19, 2012), available at <http://www.chron.com/opinion/outlook/article/The-lessons-we-learned-from-Deepwater-disaster-3495909.php#page-1>.

148 *BOP Forum Transcripts*, BUREAU OF SAFETY AND ENVTL ENFORCEMENT, available at http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/BSEE_News_Briefs/Transcripts/Panel%201%20FinalEdit.pdf (comments were made by DOI Deputy Secretary David Hayes in Panel 1: Technology Needs Identified from the Deepwater Horizon).

149 *Id.*

150 *Id.*

151 *BSEE to Host Forum on Next-Generation Blowout Preventer and Control System Technology, Management, and Regulations*, BUREAU OF SAFETY AND ENVTL ENFORCEMENT (May 8, 2012) <http://bsee.gov/BSEE-Newsroom/Press-Releases/2012/press05082012.aspx>.

Gulf of Mexico (GMG290000), offshore of the Texas and Louisiana coasts, expired September 30, 2012.¹⁵² EPA published notice of the proposed new General Permit in the Federal Register on March 7, 2012.¹⁵³ EPA proposed seven major changes to the permit:

- (1) Define operators for the purpose of the permit;
- (2) Delete New Source Exemption language;
- (3) Add a toxicity test requirement for hydrate control fluids;
- (4) Add a provision on spill prevention best management practices;
- (5) Authorize de minimis discharges caused by subsea safety valve testing;
- (6) Require electronic Notice of Intent and discharge monitoring reporting; and
- (7) Establish updated critical dilutions for whole effluent toxicity limitations for produced water.¹⁵⁴

The comment period closed May 7, 2012,¹⁵⁵ and the new permit was reissued on September 28, 2012 and became effective on October 1, 2012.¹⁵⁶ The new permit expires on September 28, 2017.¹⁵⁷

VI. CONCLUSION

There are unique and difficult challenges in the field of offshore drilling, from the task of keeping employees safe, to completing difficult drilling projects, and protecting the environments in which these complex operations occur. On top of that, companies face expansive liability schemes and evolving regulatory requirements such as those discussed in this paper. As existing regulations change and new regulations are issued, operators and others involved will need to vigilantly monitor the new developments and reexamine their internal programs to keep pace and comply. Companies also need to reevaluate their exposure and ways to potentially mitigate or limit liability.

Amber MacIver is an attorney with Erskine & Blackburn L.L.P. Prior to her current position, she was a Senior Associate in the Austin office of Baker Botts L.L.P., practicing in the areas of environmental law and litigation. The author would like to thank Samia Rogers for her contributions to the article.

152 Notice of Proposed NPDES General Permit, 77 Fed. Reg. 13,601 (Mar. 7, 2012).

153 *Id.*

154 *Id.*

155 *Id.*

156 Notice of Proposed NPDES General Permit, 77 Fed. Reg. 6,160 (Oct. 10, 2012).

157 *Id.*

THE LAST FRONTIER: REGULATING FACTORY FARMS

BY REAGAN M. MARBLE

I.	Background	176
II.	The Problem	178
	A. Animal Waste and Water Quality	179
	B. Animal Waste and Air Quality	180
III.	The Regulators and the Regulations	181
	A. Federal Regulation	182
	1. Regulation Under the Clean Water Act	183
	a. <i>The 2003 Final Rule</i>	183
	b. <i>The Waterkeeper Alliance Decision</i>	184
	c. <i>The 2008 Final Rule</i>	186
	2. Regulation Under the Clean Air Act	187
	B. State Regulation	187
	C. Local Regulation	188
IV.	The Proposed Solution	188
	A. Traditional Regulation	188
	B. Reflexive Regulation	189
	C. Reflexive CAFO Regulation	191
	1. Mandatory Public Information Disclosure	191
	2. Hazard Warnings	192
	3. Green-Label Certification	193
	4. Procedure-Based Standards	194
V.	Conclusion	195

The final frontier of environmental regulation, concentrated animal feeding operations—more commonly known as “factory farms” or CAFOs—negatively impact water and air quality. Although an efficient agricultural practice, CAFOs did not become a fundamental part of our agricultural economy until after the codification of our nation’s major environmental regulations. For many years, animal feeding operations remained unregulated from many environmental standards. Although federal agencies, states, and the public continually attempt to wrangle animal feeding operations into the regulatory arena, significant regulatory efforts have consistently failed in light of the scientific hurdles, partisan politics, and overwhelming costs associated with traditional environmental regulation.

This note proposes a solution to the outdated and ineffective regulations in place. Based on the well-known theory of reflexive law, the proposed solution shifts the regulatory focus from command-and-control regulations to an information-based scheme. Information-based policies require entities to publically disclose environmental impact data, incorporate health hazard warnings, or include green labels on the final product. Additionally, information-based policies use procedure-based standards that

focus on planning to prevent pollution. The practical effect of reflexive policy is to draw public attention to polluters, allowing informed consumers to support environmentally-friendly businesses that disclose environmentally-responsible information. Reflexive law policies should cost little to implement, even less to conduct, and could benefit consumers and CAFOs while minimizing the free market impact.

This article begins with a general introduction to CAFOs. Following that is a discussion of animal waste and the waste's impact on water and air quality, including several examples of environmental disasters. Subsequently, the note dives into the current complex and ineffective regulatory scheme, beginning with federal regulation under the Clean Air and Clean Water Acts, and eventually, wading through additional state and local regulation.

After the reader has a basic understanding of CAFOs, their impact on the environment, and the current regulatory scheme, this note proposes a solution. Part IV begins with an analysis of traditional command-and-control regulation, highlighting the problems and inefficiencies such regulation presents. A basic overview of reflexive policy follows, including the policy's history, overall objectives, and its critiques. And finally, this note provides the reader with a glimpse into a mandatory public information disclosure program, a hazard warning program, a green-label program, and procedure-based standards as applied to concentrated animal feeding operations.

I. BACKGROUND

An "animal feeding operation" (AFO) is defined as:

"[a] lot or facility . . . where the following conditions are met: (i) Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and (ii) crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility."¹

This note focuses on a specific sub-category of animal feeding operations known as a "concentrated animal feeding operations" (CAFOs). A concentrated animal feeding operation is defined as an AFO that meets the size thresholds of a large CAFO² or a medium CAFO.³

1 40 C.F.R. § 122.23(b)(1) (2012).

2 A *Large Concentrated Animal Feeding Operation* is defined as:

[an AFO that] stables or confines as many as or more than the numbers of animals specified in any of the following categories: (i) 700 mature dairy cows, whether milked or dry; . . . (iii) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs; (iv) 2,500 swine each weighing 55 pounds or more; (v) 10,000 swine each weighing less than 55 pounds; (viii) 55,000 turkeys; (ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system; [or] (x) 125,000 chickens (other than laying hens) if the AFO uses [anything] other than a liquid manure handling system

Id. § 122.23(b)(4).

3 A *Medium Concentrated Animal Feeding Operation*:

The economic efficiency of CAFOs is virtually undeniable. Their economic impact blossomed in the late 1970s and early 1980s when the beef, poultry, and pork industries began to streamline.⁴ Because agriculture is now a vertically integrated industry,⁵ CAFOs have become a niche within the spectrum of vertical integration and now exist in all areas of livestock production, including the bovine industry (feedlots and dairies), the poultry industry (broiler houses or poultry factories), and the pork industry (feedlots and farms).

Animal feeding operations expanded rapidly in the late 20th century.⁶ In 1966 it took over 1 million farms to raise 57 million swine.⁷ Compare that to 2001, when it took only 80,000 farms to raise 57 million swine.⁸ A reduction in the number of farms it requires to grow pork as a commodity for consumption decreases the number of acres required per animal, decreases the amount of manual labor, and most importantly, because feeding becomes much more efficient at higher concentrations, decreases an operation's feed-conversion ratio.⁹ Tighter vertical coordination decreases financial risks, increases productivity, and thus, results in lower commodity costs of production and higher profit margins.¹⁰

includes any AFO with the type and number of animals that fall within any of the ranges listed [below] and which has been defined or designated as a CAFO. [] The type and number of animals that it stables or confines falls within any of the following ranges: (A) 200 to 699 mature dairy cows; [] (C) 300 to 999 cattle other than mature dairy cows or veal calves []; (D) 750 to 2,499 swine each weighing 55 pounds or more; (E) 3,000 to 9,999 swine each weighing less than 55 pounds; [] (H) 16,500 to 54,999 turkeys; (I) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system; [or] (J) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system.

Id. § 122.23 (b)(6).

4 See generally J.M. MACDONALD & W.D. MCBRIDE, U.S. DEP'T OF AGRIC., *THE TRANSFORMATION OF U.S. LIVESTOCK AGRICULTURE: SCALE, EFFICIENCY, AND RISKS* (2009), available at <http://www.ers.usda.gov/Publications/EIB43/EIB43.pdf>.

5 Vertical Integration is defined as "the combining of manufacturing operations with a source of materials and/or channels of distribution under a single ownership or management structure to maximize profits." *Vertical Integration Definition*, MERRIAM-WEBSTER, <http://www.merriam-webster.com> (last visited April 4, 2012).

6 See Polly Walker et al., *Public Health Implications of Meat Production and Consumption*, 8(4) PUBLIC HEALTH NUTRITION 348, 351 (2005), available at http://www.jhsph.edu/sebin/y/h/PHN_meat_consumption.pdf.

7 *Id.*

8 *Id.*

9 The feed-conversion ratio (FCR) is a number illustrating how efficiently an animal converts feed into mass. For example, if an animal consumes 6 lbs of feed and gains 5lbs—the feed conversion ratio is 1.2 lbs (6lbs of feed disappearance for each 5lb gained). Thus, to gain 1lb the animal needs to consume 1.2 lbs of feed. The lower the ratio is, the more efficient the gain. See Williard C. Losinger, *Feed Conversion Ratio of Finisher Pigs in the USA*, 36 PREVENTIVE VETERINARY MEDICINE 287, 287-88 (1998).

10 See MacDonald & McBride, *supra* note 4, at 16-18.

For example, in 2005, a dairy operation consisting of 1,000 cows (a large CAFO)¹¹ had an average cost of \$13.59 per hundredweight (cwt) whereas a dairy consisting of 100 cows (a small farm) had a cost of \$20.82 per cwt.¹² If the average weight of a dairy cow is 1,000 lbs, it costs a small farmer an additional \$72.30 per cow/per year to operate his small farm—a difficult margin to overcome in the most robust market.¹³ Thus, growing dairy cattle in a large CAFO results in a substantial competitive advantage by increasing productivity for a low cost. And an efficient increase in productivity means an increase in profits for livestock producers, and subsequently, results in a decrease in the price of the ultimate consumer product.

II. THE PROBLEM

The United States Department of Agriculture's (USDA) 2007 Census of Agriculture (Census) was a comprehensive effort to identify farmers or ranchers who produced and sold \$1,000 or more of agricultural products in a year.¹⁴ According to the Census, farms and ranches in the United States held over 96 million head of cattle,¹⁵ 67 million hogs,¹⁶ and 1.6 billion broilers and meat chickens in 2007.¹⁷ The Department of Agriculture indicates that the number of animals raised for consumption in the United States has *increased* while the number of farms required to raise those animals has *decreased*.¹⁸ The majority of livestock in the United States are now produced in animal feeding operations and the number of animals located in concentrated animal feeding operations is unprecedented.¹⁹ As a result, the amount of animal waste produced at these facilities is astounding. Livestock produces over 1.8 billion tons of manure per year—200 times more waste than humans produce in the United States.²⁰ Further, this waste does not consist only of manure—it is a mixture of urine, feces, animal hair, nitrogen, phosphorous, antibiotics, trace elements such as arsenic, pesticides, pathogens, and hormones.²¹

The concentration of livestock production has raised serious environmental concerns for both water and air quality.²² Concentrated animal feeding operations typically contain their animal waste in on-site tanks made of concrete or earthen pits colloquially

11 40 C.F.R. § 122.23(b)(4)(iii) (2012).

12 See MacDonald & McBride, *supra* note 4, at 14.

13 See *id.*

14 See U.S. DEP'T OF AGRIC., 2007 CENSUS OF AGRICULTURE VIII (2009), available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/usv1.pdf [hereinafter 2007 Census].

15 *Id.* at 381.

16 *Id.* at 402.

17 *Id.* at 411.

18 See Walker et al., *supra* note 6, at 351.

19 See *id.*

20 J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 *ECOLOGY L.Q.* 263, 285 (2000).

21 See *id.* at 285-286; See also Walker et al., *supra* note 6, at 351 (detailing the composition of animal waste).

22 See Ruhl, *supra* note 20, at 287-91.

known as “lagoons.”²³ Once a lagoon has reached its capacity, the waste is applied on nearby fields as fertilizer.²⁴ However, these lagoons can fail and the results are often catastrophic.²⁵

The largest spill to date occurred at a North Carolina hog feeding operation. In 1995, a 25 million gallon manure tank collapsed, contaminating 364,000 acres of wetlands that were rendered unusable for shellfishing.²⁶ Often, spills on a small scale go unreported. In Iowa, during the 1990s, there were over sixty recorded spills.²⁷ One of the Iowa spills killed “8,861 fish, polluted thirty miles of river, and closed a [public] recreation area.”²⁸

Bovine and hog operations are not the only animal feeding operations producing large quantities of animal waste. In 1998, poultry farms in the Delmarva area, that includes portions of Delaware, Maryland, and Virginia, produced 3.2 billion pounds of waste.²⁹ Unbeknownst to most, poultry waste is often the most volatile animal waste because chicken manure contains twice as much phosphorous as human waste.³⁰ Waste runoff with high phosphorous levels can detrimentally affect aquatic ecosystems.³¹ Even properly managed animal waste can be deleterious to air and water quality.

A. ANIMAL WASTE AND WATER QUALITY

In general, the agriculture industry is a major source of water pollution. In particular, animal feeding operations pollute water sources through runoff from operating facilities (nonpoint source pollution).³² The major component of animal feeding operation runoff is animal waste, which accounts for one-third of agricultural nonpoint source water pollution.³³ Once animal waste reaches waterways, it can create excessive nutrient pollution. Eutrophication of aquatic habitat and degradation of ecological processes are two devastating effects of excessive nutrient pollution.³⁴ Eutrophication is “the process by which a body of water becomes enriched in dissolved nutrients (as phosphates) that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen.”³⁵

For example, polluted runoff from agriculture entering the Mississippi River Delta is responsible for a hypoxic “dead zone” located thousands of miles downstream in the Gulf of Mexico.³⁶ The dead zone may have negative effects on coastal economies (i.e. shrimp-

23 *Id.* at 285-86 (discussing “manure lagoons in western Illinois”).

24 *Id.* at 285.

25 *See id.* at 285-87.

26 *Id.* at 286.

27 *Id.*

28 *Id.*

29 *Id.* at 286-87.

30 *Id.* at 286.

31 *See id.* at 286-88.

32 *See Ruhl, supra* note 20, at 287.

33 *See id.* at 290.

34 *Id.*

35 *Eutrophication Definition*, MERRIAM-WEBSTER, <http://www.merriam-webster.com> (last visited Apr. 4, 2012).

36 *See Ruhl, supra* note 20, at 289.

ing, fishing, and eco-tourism).³⁷ This problem is not an isolated problem in the Mississippi River Delta. Hypoxia problems associated with agricultural runoff are very common in coastal regions, including areas of the Chesapeake Bay.³⁸ Further, hypoxia is not the only ramification associated with animal feeding operation runoff in the Chesapeake Bay region.³⁹

In August 1997, a toxic microorganism known as *Pfiesteria Piscicida*⁴⁰ was linked to mysterious deaths and injuries to fish.⁴¹ Local fishermen experienced confusion, short-term memory loss, nausea, flu-like symptoms, breathing difficulties, rashes, and lesions.⁴² Following heated debates between environmentalists, fishermen, and the agricultural community, the microorganism was linked to chicken waste from poultry farm runoff.⁴³ Ultimately, the Maryland poultry industry, which contributed \$2.1 billion annually to the Maryland economy, argued that regulations targeting factory farms would devastate their industry.⁴⁴ Thus, the runoff remained unregulated.⁴⁵

B. ANIMAL WASTE AND AIR QUALITY

Not only does animal waste negatively impact water quality, animal waste is also detrimental to air quality. Animal waste is a major source of air pollution, and animal feeding operations emit hydrogen sulfide, ammonia nitrogen, and methane at levels sur-

37 See Otto C. Doering et al., NOAA COASTAL OCEAN PROGRAM, EVALUATION OF THE ECONOMIC COSTS AND BENEFITS OF METHODS FOR REDUCING NUTRIENT LOADS TO THE GULF OF MEXICO 21-22 (1999), available at http://oceanservice.noaa.gov/products/hypox_t6_final.pdf.

38 See generally Thomas E. Jordan et al., *Effects of Agriculture on Discharges of Nutrients from Coastal Plain Watersheds of Chesapeake Bay*, 26 J. ENVTL. QUALITY 836 (1997).

39 See Ruhl, *supra* note 20, at 290.

40 This genus of dinoflagellates is found in waters, especially along the middle and southern Atlantic coast of the United States, and produces a toxin that causes skin lesions in fish, and that feeds upon the lesions sometimes causing large fish die-offs, and that may cause symptoms (such as skin lesions and memory loss) in humans exposed to the toxin. *Pfiesteria Definition*, MERRIAM-WEBSTER, <http://www.merriam-webster.com> (last visited Apr. 4, 2012).

41 *What You Should Know About Pfiesteria*, MARYLAND DEP'T OF NATURAL RES., <http://www.dnr.state.md.us/bay/cblife/algae/dino/pfiesteria/facts.html> (last visited Feb. 10, 2013).

42 See John P. Almeida, *Nonpoint Source Pollution and Chesapeake Bay Pfiesteria Blooms: The Chickens Come Home to Roost*, 32 GA. L. REV. 1195 (1998).

43 See Dan Fesperman & Timothy B. Wheeler, *Chicken Waste Linked to Toxin in Pocomoke Nutrient-rich Runoff May Bolster Pfiesteria*, BALTIMORE SUN, Sept. 7, 1997, at 1A (examining the findings and debates following the Maryland Pfiesteria outbreak).

44 *Id.*

45 See Douglas M. Birch, *Microbe vs. Chicken Little*, BALTIMORE SUN, Sept. 17, 1997, at 1A (discussing the reactions of farmers to public outcry requesting stringent regulation of poultry farms).

mounting those of other industries.⁴⁶ In fact, the levels of pollutants emitted often exceed those of other major sources.⁴⁷

For example, the Minnesota Pollution Control Agency conducted studies that revealed that large-scale feedlots emitted hydrogen sulfide at levels exceeding the allowable emission standards for other industries.⁴⁸ Often, feedlots exceeded allowable standards by up to fifty times, and similar reports showed that ammonia nitrogen emissions are often greater and more detrimental than hydrogen sulfide emissions.⁴⁹ In North Carolina, hog feeding operations were responsible for over 170 million pounds of airborne ammonia nitrogen emissions.⁵⁰ Once in the air, nitrogen oxide can be a threat to human health, agricultural crops, and natural ecosystems.⁵¹

In light of the EPA's recent addition of methane to the Greenhouse Gas (GHG) list, the agricultural industry needs to be wary of more than its hydrogen sulfide and ammonia nitrogen emissions.⁵² Methane remains in the atmosphere for nine to fifteen years and is over twenty times more effective at trapping heat than carbon dioxide, and accordingly, the gas has a huge impact on climate change.⁵³ Moreover, because agricultural activities are some of the largest producers of methane gas, EPA is encouraging the industry to voluntarily implement cost-effective management methods and technologies to reduce methane emissions.⁵⁴ Until such management methods and technologies are implemented, methane will continue to have deleterious impacts on air quality.

III. THE REGULATORS AND THE REGULATIONS

Federal and state regulators have attempted to regulate all facets of agricultural activity, resulting in a constant struggle between the regulators and the regulated. This struggle will persist because the right to farm has been and likely will always be recognized and protected by state legislatures.⁵⁵ Right-to-farm laws protect individuals en-

46 See NATURAL RESOURCE DEFENSE COUNCIL, AMERICA'S ANIMAL FACTORIES: HOW STATES FAIL TO PREVENT POLLUTION FROM LIVESTOCK WASTE CH. 12: MINNESOTA 1-2 (1998) available at http://agrienvarchive.ca/bioenergy/download/nrdc_animalfactory.pdf [hereinafter AMERICA'S ANIMAL FACTORIES]; Ruhl, *supra* note 20, at 291-92.

47 See Ruhl, *supra* note 20, at 292.

48 *Id.*

49 *Id.* at 292 n. 171.

50 *Id.* at 292.

51 *Id.* at 291-92.

52 See *Methane Emissions*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/methane/> (last updated Jun. 14, 2012).

53 See *id.*

54 *Id.*

55 See, e.g., *Barrera v. Hondo Creek Cattle Co.*, 132 S.W.3d 544, 547 (Tex. App.—Corpus Christi 2004, no pet.) (holding that legislation protected a feedlot's right to farm); see also *Lindsey v. DeGroot*, 898 N.E.2d 1251 (Ind. Ct. App. 2009) (holding that a dairy operation had the right to farm under state statute).

gaged in agricultural activities from nuisance lawsuits.⁵⁶ So long as an agricultural producer is properly engaged in the activity, complies with all environmental regulations, and was situated at the locale at a time prior to the individual whom brings the lawsuit, agricultural producers are insulated from otherwise detrimental legal action.⁵⁷ While the right to farm protects animal feeding operations from most common law nuisance actions, a farmer and his operation must still comply with all environmental laws. Therefore, environmental regulations (or more aptly the associated recourse environmental regulations provide) may be the public's only avenue of protection against polluting agricultural operations.

A. FEDERAL REGULATION

The struggle between the federal government and agriculture regarding the regulation of air and water quality is extensive and spans decades. In 1977, the struggle began as EPA developed a regulatory structure under the Clean Water Act (CWA) and promulgated effluent limitation guidelines (ELGs).⁵⁸ ELGs establish the maximum allowable amounts of pollution that facilities may discharge.⁵⁹ EPA amended the CWA through the Water Quality Act of 1987, and further expanded upon the effluent limitation guidelines.⁶⁰ Fifteen years later, EPA issued a new rule that updated and modified specific effluent limitation guidelines for CAFOs.⁶¹ However, the Second Circuit struck down major provisions of the 2003 rule in the 2005 *Waterkeeper Alliance* decision.⁶² Ultimately, EPA issued a revised rule in 2008.⁶³

The struggle between EPA and agriculture is not isolated to the CWA. Under the Clean Air Act (CAA), CAFOs are potentially subject to regulation of air emissions.⁶⁴ The first CAA passed in 1963, but the basic provisions of the CAA were expanded in 1970 to cover almost all industrial and mobile sources of pollution.⁶⁵ The Clean Air Act Amendments of 1977⁶⁶ and the Clean Air Act of 1990⁶⁷ expanded upon the 1970 re-

56 See generally Neil D. Hamilton, *Right to Farm Laws Reconsidered: Ten Reasons Why Legislative Efforts to Resolve Agriculture Nuisances May Be Ineffective*, 3 DRAKE J. AGRIC. L. 103, 107 (1998).

57 See *id.* at 104-06.

58 Federal Water Pollution Control Act Amend. of 1977, Pub. L. No. 95-217, § 1251, 91 Stat. 1566.

59 See 33 U.S.C. § 1311 (2012).

60 Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7.

61 National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for CAFOs, 68 Fed. Reg. 7176 (Feb. 12, 2003) (codified at 40 C.F.R. pt. 9, 122, 123, 412) [hereinafter 2003 CAFO Rule].

62 See *Waterkeeper Alliance, Inc. v. Env'tl. Prot. Agency*, 399 F.3d 486, 490 (2d Cir. 2005).

63 Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Guidelines for CAFOs in Response to the Waterkeeper Decision, 73 Fed. Reg. 225 (Nov. 20, 2008) (codified at 40 C.F.R. pt. 9, 122, 412) [hereinafter 2008 CAFO Rule].

64 See Dustin Till, *Environmental Groups Press for Federal Regulation of Air Emissions for Environmental Feeding Operations*, MARTEN LAW (April 27, 2011), <http://www.martenlaw.com/newsletter/20110427-afo-air-emissions-regulations>.

65 See *History of the Clean Air Act*, U.S. ENVTL. PROT. AGENCY, http://epa.gov/oar/caa/caa_history.html (last updated Feb. 17, 2012).

66 Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 108(3), 91 Stat. 185.

quirements, established a national permit program for stationary sources, and increased EPA's ability to enforce these requirements.⁶⁸ Unlike the CWA, the Supreme Court upheld most of the CAA's most significant regulations affecting agriculture in the *Whitman* decision.⁶⁹

1. REGULATION UNDER THE CLEAN WATER ACT

The CWA is the touchstone of the laws regulating water pollution. The act has several goals, including eliminating discharges of toxic substances into waters, increasing water quality standards, and eliminating water pollution. Introduced in 1977,⁷⁰ the CWA expanded the Federal Pollution and Control Amendments of 1972.⁷¹ Generally, waters containing a "significant nexus" to "navigable waters" fall within the CWA's regulatory bounds and are subject to all regulatory requirements and guidelines.⁷² The CWA has six major statutory titles; Title I (Research and Related Programs), Title II (Grants for Construction of Treatment Works), Title III (Standards and Enforcement), Title IV (Permits and Licenses), Title V (General Provisions), and Title VI (State Water Pollution Control Revolving Funds).⁷³ Of the six titles in the CWA, Titles III and IV impact animal feeding operations the most.⁷⁴

Titles III (Standards and Enforcement) and IV (Permits and Licenses) set forth the standards for many programs such as the Technology-Based Standards Program (TBS), the Water Quality Standards Program (WQS), the Nonpoint Source Management Program, and the National Pollutant Discharge Elimination System (NPDES).⁷⁵ Section 301 of the CWA prohibits the discharge of pollutants from any point source into waters of the United States without a national pollution discharge elimination system (NPDES) permit issued by the EPA or an authorized state agency.⁷⁶ Most importantly, the act expressly defines concentrated animal feeding operations as point sources.⁷⁷

a. THE 2003 FINAL RULE

The EPA promulgated the 2003 CAFO Rule to update old policies, adequately reflect advancements in technology, and mitigate increased pollution from CAFOs.⁷⁸ First, the rule established non-numerical best management practices that applied to "production areas" and "land application areas."⁷⁹

67 Clean Air Act Amendments of 1990, Pub. L. No. 101-549, §173, 104 Stat. 2399.

68 See *History of the Clean Air Act*, *supra* note 65.

69 See generally *Whitman v. Am. Trucking Ass'n, Inc.*, 531 U.S. 457 (2001).

70 Clean Water Act Amendments of 1977, Pub. L. No. 95-217, 91 Stat. 1566.

71 Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816.

72 See *Rapanos v. United States*, 547 U.S. 715 (2006) (stating that the CWA governs discharges to "navigable waters" but rejecting the idea that the term "waters of the United States" was limitless).

73 Clean Water Act, 33 U.S.C. §§ 1251–1387 (2012).

74 See *id.* §§ 1311–1346.

75 See *id.* §§ 1311, 1313, 1392, 1342.

76 *Id.* § 1311(a).

77 *Id.* § 1362(14).

78 2003 CAFO Rule, *supra* note 61, at 7176.

79 *Id.* at 7182-85.

Examples of production areas include the area to which an animal is confined or a manure storage area.⁸⁰ Discharges from a production area were required to meet a performance standard.⁸¹ This performance standard required existing CAFOs to maintain waste containment structures that generally prohibit discharges except when overflows or discharges are caused by a twenty-five year, twenty-four hour rainfall event.⁸² Further, new CAFOs could not discharge any waste except in the event of overflows or runoff resulting from a 100 year, twenty-four hour rainfall event.⁸³

Examples of land application areas include land to which manure and other animal waste is applied as fertilizer.⁸⁴ Standards impacting land application areas were primarily based upon best management practices (BMPs). For example, these areas were required to implement vegetated buffer zones and could not be located within certain distances of bodies of water.⁸⁵ Further, the 2003 rule required CAFOs to submit an annual performance report to EPA⁸⁶ and implement a nutrient management plan (NMP) for treating animal waste.⁸⁷ In addition, most importantly, the 2003 rule required all CAFOs to apply for NPDES permits.⁸⁸

b. THE *WATERKEEPER ALLIANCE* DECISION

The Second Circuit Court of Appeals issued a very controversial decision in the case of *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005). Although the findings upset environmentalists and the agriculture industry alike, the ruling reflected a partial victory for both parties.⁸⁹ Because the case consolidated multiple suits, it addressed almost every controversial provision within the 2003 rule.⁹⁰

Arguably the most controversial aspect of the 2003 rule was EPA's interpretation of the agricultural stormwater discharge provisions. Any runoff resulting from a land application of manure based fertilizer (i.e. waste), administered in accordance with site-specific NMPs were excluded from NPDES permitting requirements as "agricultural stormwater."⁹¹ However, EPA identified situations where CAFOs would not be subject the agricultural stormwater exemption. For example, when the amount of waste applied over-saturates the fields, the 2003 rule classifies the runoff as a discharge from a point

80 *Id.* at 7269.

81 *See id.* at 7221.

82 *Id.* at 7182-83.

83 *Id.* at 7183.

84 40 C.F.R. § 122.23(b)(3) (2012).

85 2003 CAFO Rule, *supra* note 61, at 7209.

86 *Id.* at 7230-31.

87 *Id.* at 7228.

88 *Id.* at 7176.

89 *See* CLAUDIA COPELAND, U.S. CONG. RESEARCH SERV., ANIMAL WASTE AND WATER QUALITY: EPA'S RESPONSE TO THE *WATERKEEPER ALLIANCE* COURT DECISION ON REGULATION OF CAFOs 3 (November 8, 2011), available at <http://www.fas.org/sgp/crs/misc/RL33656.pdf>.

90 *See Waterkeeper*, 399 F.3d at 490.

91 *Id.* at 509.

source (i.e. the CAFO) requiring an NPDES permit.⁹² The Second Circuit upheld EPA's interpretation of the CWA's statutory language as reasonable.⁹³

The agricultural stormwater provisions that established a duty to apply for an NPDES permit were another controversial aspect of the 2003 Rule. All CAFOs were required to apply for an NPDES permit unless they were able to demonstrate a lack of potential for discharge.⁹⁴ EPA reasoned that CAFOs have a potential to discharge pollutants into United States' waters; therefore, CAFOs must actively comply with NPDES requirements (i.e. apply for an NPDES permit).⁹⁵ Feedlot operators argued that the duty to apply regulations exceeded the EPA's authority, and the Second Circuit agreed.⁹⁶ The court held that EPA can require a CAFO to apply for a permit only where this is an actual pollutant discharge, not just the potential to discharge.⁹⁷

Next, the *Waterkeeper* court addressed a legal challenge to the terms of the nutrient management plans (NMPs).⁹⁸ The 2003 rule required all NPDES permit holders to develop an NMP that satisfied the minimum requirements.⁹⁹ In accordance with the 2003 rule, a copy of the NMP was to be kept on-site at the feeding operation.¹⁰⁰ However, environmentalists argued that the rule violated the Administrative Procedure Act because it failed to make the NMP part of the NPDES permit.¹⁰¹ If EPA had included the NMP as part of the NPDES permit process, the NMP would be subject to both public comment and citizen group enforcement (i.e. allowing for a private cause of action).¹⁰² Because the practical effect of EPA's actions was to bar citizen enforcement, the Second Circuit Court vacated this portion of the rule.¹⁰³

Finally, the 2003 rule modified effluent limitation guidelines (ELGs) for CAFOs.¹⁰⁴ The most controversial aspects of the modified ELGs were the selection of best available technology guidelines, the economic methodologies, and the best conventional technology (BCT) guidelines for conventional pollutants.¹⁰⁵ The Second Circuit Court upheld EPA's selection of the best available technologies because the court said the agency analyzed extensive data and considered approximately 11,000 public comments on the matter, and therefore, adequately justified its results.¹⁰⁶ The court also upheld the economic methodologies used to determine whether the technology-based permit requirements were feasible because EPA had reasonably concluded the results to be achievable

92 *Id.* at 508, citing *Concerned Area Residents for Env't. v. Southview Farm*, 34 F.3d 114, 121 (2d Cir. 1994).

93 *Id.* at 509.

94 2003 CAFO Rule, *supra* note 61, at 7181.

95 *Id.* at 7184-85.

96 *Waterkeeper*, 399 F.3d at 504.

97 *Id.*

98 *Id.* at 502.

99 2003 CAFO Rule, *supra* note 61, at 7228.

100 *Id.*

101 *Waterkeeper*, 399 F.3d at 498.

102 *See id.* at 503-04.

103 *Id.*

104 2003 CAFO Rule, *supra* note 61, at 7185-86.

105 *See generally Waterkeeper*, 399 F.3d 486.

106 *Id.* at 512-13.

by the industry as a whole.¹⁰⁷ However, the court remanded the best conventional control technology effluent guidelines because EPA had not, in accordance with the CWA, affirmatively found that its BCT-based ELGs were, in fact, the “best conventional technology.”¹⁰⁸ The court remanded the issue for EPA to make such affirmative finding.¹⁰⁹

C. THE 2008 FINAL RULE

After the *Waterkeeper Alliance* court either struck down or modified many of the major provisions in the 2003 rule, EPA published revised regulations that addressed each of the four primary areas in the Second Circuit’s decision.¹¹⁰ First, the 2008 rule replaced the 2003 rule’s “duty to apply” standard with a standard that required CAFOs that discharged or proposed to discharge to apply for an NPDES permit.¹¹¹ The 2008 rule further specified that a CAFO proposes to discharge if “designed, constructed, operated, or maintained” in a manner that a discharge will occur.¹¹² Once again, a circuit court struck down EPA’s rule on this issue, and held that the “propose to discharge” standard exceeded the EPA’s authority.¹¹³

Second, EPA modified the Nutrient Management Plan requirements, and required the permitting authority to incorporate the terms of the NMP into the NPDES permit.¹¹⁴ The NMPs, including the specific terms, are now publicly available—thus, requiring public comment and effectively allowing for a private cause of action.¹¹⁵ The EPA further specified that the terms of the NMP must include the “information, protocols, best management practices and other conditions” necessary to meet the 2003 rule’s NMP standards.¹¹⁶

Lastly, in response to the court’s remand of the BCT standard, EPA clarified its stance on its previous BCT standards that apply to fecal coliform.¹¹⁷ The Second Circuit remanded the BCT standards for pathogens and ordered EPA to evaluate whether the standard achieved the effluent limitations guidelines.¹¹⁸ In the 2008 final rule, EPA made an affirmative finding that its determination of BCT for fecal coliform was, in fact, appropriate.¹¹⁹ Although most expected more stringent standards to be introduced, EPA announced that it would not promulgate such standards and concluded that there were no economically achievable technologies that could achieve more stringent limitations.¹²⁰

107 *Id.* at 513-19.

108 *Id.* at 519.

109 *Id.* at 524.

110 See U.S. ENVTL. PROT. AGENCY, CONCENTRATED ANIMAL FEEDING OPERATIONS FINAL RULEMAKING—FACT SHEET (Oct. 2008), available at http://www.epa.gov/npdes/pubs/cafo_final_rule2008_fs.pdf.

111 2008 CAFO Rule, *supra* note 63, at 70422.

112 *Id.* at 70423.

113 *Nat’l Pork Producers Council v. Env’tl. Prot. Agency*, 635 F.3d 738 (5th Cir. 2011).

114 2008 CAFO Rule, *supra* note 63, at 70442.

115 See *id.* at 70439.

116 *Id.* at 70443.

117 *Id.* at 70463.

118 *Waterkeeper*, 399 F.3d at 519.

119 2008 CAFO Rule, *supra* note 63, at 70463.

120 *Id.*

2. REGULATION UNDER THE CLEAN AIR ACT

The primary goal of the Clean Air Act (CAA) is to improve air quality to promote public health and welfare.¹²¹ Originally enacted in 1963 and expanded in 1967, the CAA was amended to establish regulatory controls for air pollution in 1970, 1977, and 1990.¹²² The CAA has seven major statutory titles; Title I (Programs and Activities), Title II (Emission Standards for Moving Sources), Title III (General Provisions), Title IV (Noise Pollution), Title IV-A (Acid Deposition Control), Title V (Permits), and Title VI (Stratospheric Ozone Protection).¹²³ Out of the seven titles in the CAA, Title I, Part C impacts CAFOs the most.¹²⁴

Title I (Programs and Activities), Part C (Prevention of Significant Deterioration of Air Quality) has the potential to wrangle CAFOs into its regulatory arena. Under Title I, Part C, major stationary sources of air pollution must obtain an air permit if the sources' emissions exceed National Ambient Air Quality Standards (NAAQS). However, to be subject to NAAQS requirements, a source must emit a criteria pollutant.¹²⁵ Ammonia, which is the primary pollutant that CAFOs emit, is not considered a criteria pollutant by the CAA.¹²⁶ Thus, CAFOs are not required to obtain an air permit unless ammonia is designated as a criteria pollutant.¹²⁷

B. STATE REGULATION

Because many animal feeding operations are not required to seek an NPDES permit under the CWA, states like Arizona have created their own programs for regulating CAFOs.¹²⁸ In Arizona, CAFOs must obtain an Arizona Pollutant Discharge Elimination System (AZPDES) permit if a CAFO discharges, intends to discharge, or has ever discharged into waters of the United States.¹²⁹ The AZPDES permit requires CAFOs to submit a Notice of Intent to Discharge and a Nutrient Management Plan (NMP) as part of the application.¹³⁰ CAFO compliance is regulated via onsite inspections.¹³¹ Facilities are subject to enforcement for violations of discharge standards.¹³²

Many states have taken it upon themselves to regulate animal feeding operations, particularly in the air emissions regulatory arena. The Minnesota Pollution Control Agency (MPCA) has dedicated significant resources and attention to regulating air emissions from animal feeding operations through its Feedlot Program.¹³³ Under the pro-

121 42 U.S.C. § 7401(b) (2012).

122 See *History of the Clean Air Act*, *supra* note 65.

123 Clean Air Act, 42 U.S.C. §§ 7401–7700 (2012).

124 See *id.* §§ 7470–7492.

125 See *id.* § 7408(a).

126 See 40 C.F.R. §§ 50.1–50.17 (2012) (showing that ammonia is not listed as a criteria pollutant).

127 See Till, *supra* note 64.

128 See *Permits: Concentrated Animal Feeding Operation Program*, ARIZONA DEP'T OF ENVTL. QUALITY, <http://www.azdeq.gov/environ/water/permits/cafo.html> (last visited Feb. 3, 2012) [hereinafter *Arizona CAFO Permits*].

129 ARIZ. ADMIN. CODE § 18-9-D902 (2012).

130 *Id.*; see *Arizona CAFO Permits*, *supra* note 128.

131 ARIZ. ADMIN. CODE § R18-9-C904(C) (2012).

132 *Id.* § R18-9-720.

133 See MINN. R. §§ 7020.0200–7020.225 (2012).

gram, feedlots with a capacity of 50 or more animal units (AUs) must register with the MPCA and apply for a permit.¹³⁴ The application for a permit is extensive and requires specific design, construction, maintenance, and operation standards.¹³⁵ Along with the permit application, feedlots are required to submit an Environmental Assessment Worksheet (EAS) with a manure management plan.¹³⁶ The program monitors permitted and unpermitted feedlots to ensure compliance with state ambient air quality standards.¹³⁷

C. LOCAL REGULATION

Throughout most of the 20th Century, local zoning ordinances represented the most effective policy tools for CAFO regulation. But many of these local laws were ineffective because they shielded CAFOs from liability or did not include effective enforcement options. State right-to-farm laws also prevented zoning ordinances affecting CAFOs from being enforced. For example, a county in Iowa established a local air and water pollution ordinance that could have substantially reduced emissions from CAFOs.¹³⁸ However, the Iowa Supreme Court struck down the local ordinance because the pollution ordinance was preempted by state right-to-farm laws.¹³⁹

IV. THE PROPOSED SOLUTION

This work discusses the criticisms of traditional regulation, introduces reflexive regulation, and applies four methods of reflexive regulation as potential solutions to effective CAFO regulation.¹⁴⁰ The aim of this proposed solution is to encourage CAFOs to participate in a reflexive policy and to create market-based incentives to reduce pollution.

A. TRADITIONAL REGULATION

The Clean Water Act, Clean Air Act, and other environmental regulations are considered “command-and-control” regulations.¹⁴¹ These top-down regulations control pollution either through performance-based regulations (*i.e.*, standards) or technology-based regulations (*i.e.*, best available technologies).¹⁴² Top-down regulations can be

134 *Id.* § 7020.0350(4)(A)(1)-(2).

135 *Id.* § 7020.0350(1).

136 *Id.* § 4410.1000(4)(A).

137 *See id.* §§ 7020.0200–7020.225.

138 *See* *Worth Cnty Friends of Agric. v. Worth Cnty*, 688 N.W.2d 257, 264 (Iowa 2004) (holding local air and water pollution ordinance preempted by state law). *But see* *Borron v. Farrenkopf*, 5 S.W.3d 618, 619-20 (Mo Ct. App. 1999) (stating local permitting requirement mandating setbacks and air and water quality standards were a valid exercise of police power).

139 *Worth Cnty Friends of Agric.*, 688 N.W.2d at 265.

140 *See* Warren A. Braunig, *Reflexive Law Solutions for Factory Farm Pollution*, 80 N.Y.U. L. REV. 1505, 1539-44 (2005), for a discussion of mandatory cross-media reporting, airshed/watershed hazard warnings, and certification regimes.

141 *See generally* Eric W. Orts, *Reflexive Environmental Law*, 89 Nw. L. REV. 1227 (1995).

142 *See id.* at 1235.

problematic because violations are typically remedied by imposing civil fines or criminal prosecution.¹⁴³

Command-and-control regulations are often criticized by economists as inefficient and irrational. Although command-and-control regulations have achieved great success, studies show that they are inefficient instruments that set policy goals without considering the economic costs.¹⁴⁴ Critics of command-and-control regulations admit that best available technology requirements can be effective; however, they also claim that BAT is irrational because its results come only at a high cost to society.¹⁴⁵

In addition to economic criticisms of command-and-control regulation, there are many policy arguments against the regulations. First, because command-and-control regulations rely heavily upon continual government oversight and the efficacy of governmental oversight depends on the regulators, an administration less interested in environmental policy can hinder regulatory oversight.¹⁴⁶ Second, the administrative agencies responsible for issuing regulations (*e.g.*, EPA) are exceptionally vulnerable to undue influence by the industries they seek to regulate.¹⁴⁷ For example, it is not uncommon for an administration to appoint an industry CEO to lead a branch of government like EPA.¹⁴⁸

Finally, and most notably, command-and-control regulations are criticized by the scientific community because they are too static.¹⁴⁹ Environmental regulations are enacted at a very specific time in history, thus they are limited by the available scientific knowledge at that moment in time. Command-and-control regulations cannot change easily based on developing knowledge and are often rendered moot. For example, in the 1970s, the Clean Air Act set out to regulate air emissions from vehicles.¹⁵⁰ Accordingly, EPA mandated emission controls by requiring specific technologies.¹⁵¹ However, by the time these regulations were promulgated, suburbanization had led to double the miles traveled by the average American offsetting the gains realized by cleaner burning engines.¹⁵²

B. REFLEXIVE REGULATION

Reflexive law and policy is not a new concept, and the policy has been adopted in many areas of the world.¹⁵³ Generally, the United States has never embraced the policy, ultimately choosing to regulate environmental pollution with punishment or incentives.

143 *Id.*

144 See James E. Krier, *The Irrational National Air Quality Standards: Macro- and Micro-Mistakes*, 22 UCLA L. REV. 323, 326 (1974-1975) (studying the inefficiency of uniform ambient air quality standards).

145 Robert W. Hahn & Robert N. Stavins, *Incentive-Based Environmental Regulation: A New Era from an Old Idea?* 18 ECOLOGY L.Q. 1, 6 (1991).

146 Orts, *supra* note 141, at 1238.

147 See *id.*

148 See *Christie Whitman: Biography*, CHRISTIEWHITMAN.COM (Dec. 12, 2009) <http://www.christiewhitman.com/biography>.

149 See Orts, *supra* note 141, at 1238.

150 *Id.*

151 *Id.*

152 *Id.*

153 See *id.* at 1290 (discussing Europe Eco-Management and Audit Scheme or EMAS program).

Reflexive law uses information as a regulatory tool.¹⁵⁴ Information collection is often part of environmental regulatory schemes, but the emphasis of reflexive law is on how the data is used and collected. Reflexive environmental regulation uses the public disclosure of information to force a polluting company to internalize the cost of environmental harms due to negative consumer ramifications.¹⁵⁵ Negative consumer ramifications include boycotting, protesting, or driving company stock prices down. While companies that continually disclose poor environmental performance information suffer market backlash, companies that publish superior performance reports experience positive market feedback from consumers, neighbors, workers, and shareholders.¹⁵⁶

The overall objective of a reflexive environmental regulatory policy is to promote continuous improvement in the environmental performance of industry activities through self regulation. A reflexive regulatory scheme involves an industry (1) voluntarily participating (2) in site-based environmental management which requires a company (a) to adopt environmental policy subject to periodic review and (b) disclose details of environmental performance in public statements that will (c) be certified by a private accredited regulatory body.¹⁵⁷ Establishing a system where companies may publicly report emissions and environmental information is quick and inexpensive compared to the command-and-control system requirements EPA handles today. Moreover, from an administrative perspective, establishing a reflexive system of regulation seems to require little to no administrative costs after the system is in place.

Notably, there are many critics who express valid concerns regarding a reflexive regulatory scheme. First, a reflexive scheme neither establishes formal rules nor addresses substantive outcomes.¹⁵⁸ A reflexive system cannot predict an exact amount of environmental improvement because it relies heavily upon the actions of market actors (*i.e.*, consumers and shareholders), but neither can command-and-control regulations because such regulations are limited by ever changing scientific knowledge. Critics also point out that a reflexive regulatory program relies on public information disclosure by self-interested entities; however, any administrative agency could help ensure accurate reporting through random audits.¹⁵⁹ These criticisms drive many to believe that reflexive law will actually lead to less regulation and therefore more pollution.¹⁶⁰ While it is true that less (government) regulation will occur, the result should not be more pollution. Critics must acknowledge that it is equally possible that the opposite result may occur and that an industry's efficient level of pollution¹⁶¹ may be much lower than intended by a command-and-control system.

154 See *id.* at 1306.

155 See *id.* at 1329.

156 See Braunig, *supra* note 140, at 1524.

157 See Orts, *supra* note 141, at 1290.

158 See Braunig, *supra* note 140, at 1525.

159 *Id.*

160 *Id.*

161 The "efficient level of pollution" occurs at the point when the market inspired costs attributed to heavy pollution are equivalent to the costs of utilizing cleaner technology. *Id.*

C. REFLEXIVE CAFO REGULATION

This section discusses the applicability of reflexive regulatory approaches to concentrated animal feeding operations. The following programs theoretically arise out of a producer volunteering to join a reflexive regulatory program.¹⁶² More importantly, this section introduces specific industry examples of successful reflexive policy that would be most appropriate in a CAFO regulatory scheme.

1. MANDATORY PUBLIC INFORMATION DISCLOSURE

A reflexive regulatory scheme cannot exist without a mandatory public information disclosure program. Public disclosure of environmental performance is the hand that guides consumer behavior (negative or positive). A mandatory public information program is more than a theoretical concept and several programs have succeeded in a free market like the United States.¹⁶³ For example, the Toxic Release Inventory Program (TRI), a section of the Emergency Planning and Community Right-to-Know Act (EPCRA), requires some companies to disclose their chemical releases.¹⁶⁴ Both environmentalists and industry leaders have applauded the TRI program for its results.¹⁶⁵ First, results indicate that, from 1988 when the program began to 2002, TRI chemical releases decreased by forty-nine percent.¹⁶⁶ Evidence indicates that consumer choices, driven by the public shame associated with negative public reporting, contributed to the decrease in chemical releases.¹⁶⁷

Applying a mandatory public information disclosure program to CAFOs similar to the TRI program holds promise.¹⁶⁸ Currently, to resist regulation, CAFOs use the lack of scientific information regarding the amount of pollutant emissions or discharges attributed to its facilities against those who intend to regulate them.¹⁶⁹ But if CAFOs were required to disclose information regarding pollutant emissions to the public, environmentally-conscious consumers could choose not to support those companies whose facilities disclosed poor performance.¹⁷⁰

For example, Cargill either owns or does business with hundreds of beef feedlots in the Midwest. If those feedlots disclosed methane emissions that (comparatively) were much worse than another beef producer, conscious consumers could make the market choice to buy ground hamburger meat from the superior performing company.¹⁷¹ Thus,

162 A producer would join a voluntary reflexive regulatory program to gain a competitive market advantage through “superior” environmental performance, which results in a market shift based on consumer values (i.e. purchasing from an environmentally conscious company). See Orts, *supra* note 141, at 1311.

163 See Braunig, *supra* note 140, at 1525–28.

164 42 U.S.C. § 11023 (2012); see also Braunig, *supra* note 140, at 1525–26.

165 See Braunig, *supra* note 140, at 1525–26.

166 U.S. ENVTL. PROT. AGENCY, TOXICS RELEASE INVENTORY (TRI) PUBLIC DATA RELEASE REPORT 5 (2004), available at <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=91018N5P.txt>; see also Braunig, *supra* note 141, at 1526.

167 See Braunig, *supra* note 140, at 1526.

168 *Id.* at 1539 (discussing mandatory cross media reporting in light of TRI’s positive results).

169 *Id.* at 1533.

170 See *id.* at 1534.

171 Consumer pressure on retailers, which then filters up to producers, is a model that has been effective in other industries, from antibiotics in poultry to timber harvesting. See *id.*

to remain competitive in the market, Cargill would be forced to use technology or waste management practices that reduce the amount of methane pollution until consumers again purchased Cargill beef. Further, bad press about Cargill's feedlots might generate pressure from corporate shareholders. Shareholders are ultimately concerned with a company's "brand equity," and being labeled a serious polluter would damage the company's ability to build equity in its brand.¹⁷² Thus, companies would not only receive consumer pressure to reduce their pollution but would also receive shareholder pressure to do the same.

2. HAZARD WARNINGS

To buttress public awareness regarding the environmental hazards an industry presents, reflexive regulatory policies rely upon information utilization. Another way to use information as a regulatory tool is to use information in the form of hazard warnings. Instead of disclosing massive amounts of information to the public, a hazard warning approach directly and succinctly communicates a risk to the public. Although not a mandatory requirement, a program could require any facility that knowingly or intentionally discharges or emits pollutants to provide "clear and reasonable warning."¹⁷³ For example, California's Proposition 65 required any faucet manufacturer that intended to use lead in its faucet to place a warning on the fixture disclosing the lead hazard.¹⁷⁴ In anticipation of poor performance in the market place, faucet manufacturers began producing "lead free" faucets, and in fact, the manufacturers intentionally advertised the new "lead free" sinks in light of positive market reaction.¹⁷⁵

Animal feeding operations could implement a hazard warning program. The warning could establish hazardous "threshold levels" based upon the disclosed environmental performance information.¹⁷⁶ Unlike the tobacco industry, which was required by state regulations to place hazard warnings on cigarette packs and smokeless tobacco cans,¹⁷⁷ the livestock production industry does not distribute a product which itself is the health hazard. Instead, the industry's production process is the environmental hazard. Practically speaking, it would be impossible and unreflective of the party responsible for the true hazard to require the distributor of the meat to place the hazard warning on the product label. Therefore, any hazard warning needs to come directly from the party responsible for the hazard. Sending out hazard warnings could spur numerous market pressures, result in environmental boycotts, and reduce brand equity.

An animal feeding operation could easily distribute air and water quality warnings. For example, an operator that discharges or emits pollutants above normal levels (aka the "threshold") could be required to mail notices out to every resident in the applicable

172 See *id.* at 1535.

173 See CAL. HEALTH & SAFETY CODE § 25249.6 (2012).

174 *Id.*

175 See Clifford Rechtschaffen, *How to Reduce Lead Exposures with One Simple Statute: The Experience of Proposition 65*, 29 ENVTL. L. REP. 10,581, 10,584-85 (1999) (discussing why faucet manufacturers agreed to major reformulations to make their products lead-free in face of hazard warning requirements).

176 See Braunig, *supra* note 140, at 1543 (discussing "thresholds" as applied to CAFOs).

177 Bill Mears, *Federal Appeals Court Strikes down FDA Tobacco Warning Label Law*, CNN (Aug. 25, 2012), <http://www.cnn.com/2012/08/24/justice/tobacco-warning-label-law/index.html>.

airshed or watershed. In fear of environmentally conscious consumer backlash, a meat distributor (*i.e.*, Tyson) may not purchase a commodity from an operation that recently mailed out thousands of hazard warning notices. Accordingly, if the producer intends to continue conducting business with the distributor, it would ameliorate the environmental degradation below the threshold requiring the producer to distribute hazard warnings in the form of letters.¹⁷⁸

3. GREEN-LABEL CERTIFICATION

Of the several ways to use information as a regulatory tool, green-labels have the most immediate and direct impact on a market.¹⁷⁹ In contrast to mandatory public information disclosure and hazard warnings, green-labels communicate the positive environmental impacts of a product or its method of production. Typically in the form of a stamp or seal, green-labels play significant market roles in many United States industries. Industries using green-labels are the appliance industry's "Energy Star" label,¹⁸⁰ the timber industry's "checkmark and tree" logo,¹⁸¹ and the USDA's organic label for particular consumer products.¹⁸² These labels often serve a valuable consumer demand not met in the marketplace; the demand for environmentally-friendly commodities. For example, over eighty percent of Americans recognize the Energy Star label¹⁸³ and billions of Energy Star labeled products have been purchased since the program's inception.¹⁸⁴ Virtually all appliances, to remain competitive in the market place, must be Energy Star certified—consumers placed a market value on the Energy Star certification.

Because animal feeding operations do not directly distribute their commodity to the consumer, a CAFO would be unable to label an end product like many consumer labels. However, a reflexive program may use the same "certification" concept, although at a different stage of production. For example, a private entity (*i.e.*, a non-profit environmental council) could certify the environmental performance results that animal feeding operations publicly disclose. If an operator's results were not certified by the private certification entity, a commodity distributor may be less likely to purchase from that

178 Hazard warnings are not a perfect solution. As Warren Braunig notes, "too low a threshold" results in hundreds of hazard warnings mailed to residents a year. And too high a threshold may eliminate a producers' potential competitive advantage because the cost to meet such a threshold is exorbitant. Braunig, *supra* note 140, at 1543.

179 See *id.* (stating that labels can serve as a way to communicate effectively to consumers whether environmental standards have been met).

180 See ENERGY STAR PROGRAM, <http://www.energystar.gov> (last visited Feb. 10, 2012).

181 See Errol E. Meidinger, *The New Environmental Law: Forest Certification*, 10 BUFF. ENVTL. L.J. 211, 215-24 (2003) (detailing the timber certification program and its requirements).

182 See U.S. DEP'T OF AGRIC., USDA OVERSIGHT OVER ORGANIC PRODUCTS (2012), available at <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3004443&acct=nopgeninfo>.

183 See EPA OFFICE OF AIR AND RADIATION, NATIONAL AWARENESS OF ENERGY STAR FOR 2011: ANALYSIS OF 2011 CEE HOUSEHOLD SURVEY 4 (2012), available at <http://www.energystar.gov/ia/partners/publications/pubdocs/National%20Awareness%20of%20ENERGY%20STAR%202011.pdf?8feb-07b2>.

184 See EPA Celebrates 20th Anniversary of Energy Star/ Americans saved nearly \$230 billion in two decades, EPA NEWSROOM, (Mar. 15, 2012) <http://yosemite.epa.gov/opa/admpress.nsf/0/BDED630B984C3C1B852579C200535FB8>.

distributor if it is unable to capitalize on the operator's certification for environmental performance.

Although less feasible, direct product labeling may be possible. Home Depot, a major distributor of lumber, has capitalized on the sale of green-labeled timber.¹⁸⁵ The lumber distributor sells lumber that has been certified (and labeled) by the non-profit Forest Stewardship Council's "checkmark and tree" logo.¹⁸⁶ Although it doesn't certify anything about the quality of the product, it does guarantee that the harvest and production of the timber was conducted in an environmentally-friendly manner.¹⁸⁷ Similarly, the meat distribution industry could seek certification and labeling indicating that their product was produced in an environmentally friendly manner.

4. PROCEDURE-BASED STANDARDS

Unlike technology-based or performance-based standards, which are traditional environmental regulation's *modus operandi*, procedure-based standards "encourage[] [companies] to engage in planning and decision-making procedures through which they reflect on and manage their environmental performance."¹⁸⁸ Because many environmental regulatory agencies and policymakers alike would be reluctant to incorporate policies that do not have any "standards," procedure-based standards fill that regulatory need and encourage environmental performance without command-and-control regulation. While procedure-based standards are not "standards" in the traditional sense, policymakers should find comfort in these non-traditional, incentivizing regulatory means.

An example of a procedure-based standard is that many states require plants to engage in pollution prevention planning before issuing a permit.¹⁸⁹ For instance, the Washington State Department of Ecology requires all hazardous substance users to have a pollution prevention plan as a condition of permit issuance.¹⁹⁰ Accordingly, failure to meet the goals in the pollution prevention plan should result in rescission of the issued permit. Therefore, entities would have two incentives to reduce pollution: to obtain a permit and to keep the permit.

Procedure-based standards can be easily integrated into existing regulatory structure or implemented alongside other reflexive programs for concentrated animal feeding operations.¹⁹¹ All such a program would require is a permit to operate an animal feeding

185 See *Eco Options*, HOMEDEPOT.COM, <http://www6.homedepot.com/ecooptions/stage/index.html> (last visited Feb. 10, 2012) (showing Home Depot's "Eco Option" program, which helps consumers identify energy efficient and sustainable products).

186 See *Corporate Responsibility: Certification*, HOMEDEPOT.COM, <https://corporate.homedepot.com/CorporateResponsibility/Environment/WoodPurchasing/Pages/Certification.aspx> (last visited Feb. 10, 2012) (explaining the FSC certification program and Home Depot's use of FSC certified products).

187 See *Logo Use*, FOREST STEWARDS COUNCIL, <https://us.fsc.org/logo-use.249.htm> (Last visited Feb. 10, 2013).

188 Dennis D. Hirsch, *Green Business and the Importance of Reflexive Law: What Michael Porter Didn't Say*, 62 ADMIN. L. REV. 1065, 1114 (2010).

189 See *id.* at 1114-1115.

190 WASH. ADMIN. CODE § 173-307-010 (2012) (encouraging the redesign of "industrial, commercial, production, and other processes" to result in the reduction of hazardous waste).

191 While pollution prevention plans are similar in theory to the Nutrition Management Plans (NMPs) which the 2003 rule required, pollution prevention plans are much different in

operation above “x” number of animals, and to obtain such a permit, the producer must have a pollution prevention plan. Practically speaking, requiring pollution prevention plans might not only prevent pollution, but it may encourage communication with shareholders whom are concerned with the methods and techniques a facility plans to implement.¹⁹² Alas, companies are always concerned with their public image—and because a bad public image may result in less investment—companies will consider shareholders’ environmental concerns.

V. CONCLUSION

Concentrated animal feeding operations are efficient and have grown to hold a firm position in the livestock production cycle. These operations are the reason consumers continually pay low prices in the grocery store for chicken breasts, ribeyes, and pork chops. Unfortunately, these operations are also the reason for many environmental problems including unsanitary watershed conditions and air quality issues.

Because traditional command-and-control regulations are burdensome and inefficient, the Environmental Protection Agency should establish a reflexive regulatory program. Using information as a tool through public disclosure, hazard warnings, green-labeling, and procedure-based standards will enable the environmentally conscious consumer to impact the market and force an operation to internalize the cost of becoming environmentally friendly.

Reagan Marble is a third year law student at Texas Tech University School of Law. He has a background in political science and agricultural production. While in law school, he has served as a law clerk for the National Institute for Renewable Energy, the Railroad Commission of Texas, and the Texas General Land Office. The author would like to thank Professor Amy Hardberger for all of her encouragement, advice, and guidance while writing this article.

effect. NMPs require CAFOs to address how waste will be treated, pollution prevention plans should encourage the “redesign” of facilities to prevent runoff or “to maximize the in-process reuse or reclamation” of animal waste. See, e.g., WASH. ADMIN. CODE. § 173-307-010 (2012).

192 Hirsch, *supra* note 188, at 1113 (discussing that “government might require industry to reach out to and meet with stakeholders to demonstrate that it has given due consideration to their input regarding environmental management”).

STRICT LIABILITY IS FOR THE BIRDS: A COMPARISON OF TAKE UNDER THE MBTA AND ESA

BY TYSON LIES

I.	The Take Provisions	199
	A. The Endangered Species Act	199
	1. The ESA “Take” Provisions	200
	2. Construing the ESA’s Prohibition on Take	200
	B. The Migratory Bird Treaty Act	201
	1. The MBTA “Take” Provisions	202
	2. The Controversy Over the Scope of the MBTA	202
	3. Construing the MBTA’s Prohibition on Take	203
	a. <i>Strict Liability</i>	204
	b. <i>Strict Liability and the Scope of the MBTA</i>	206
	(1) Early Cases: <i>U.S. v. Reese</i> , Hunting and Baiting Cases ...	207
	(2) Poisoning and Indirect Takes	207
	(3) Habitation Modification and Timber Harvest	207
	(4) Indirect Take by Commercial Activity	208
	(5) Liability for Take is Uncertain Under the MBTA in Contrast to the ESA	209
II.	The Implications of Unpredictability	210
	A. Under the MBTA	210
	1. What Happened	210
	2. What Could Have Happened	211
	3. The Implications of Uncertainty	211
	B. Under the ESA	212
III.	Wind Energy and Regulatory Measures	213
	A. Habitat Conservation Plans, Incidental Take Permits, and the No Surprises Policy	214
	B. Regional HCPs: The Great Plains Wind Energy HCP	215
	C. MBTA Remedial Measures: The Guidelines	216
IV.	Future Litigation and Suggestions	219
V.	Conclusion	220

As government and private entities place greater emphasis on wind development, the Migratory Bird Treaty Act of 1918 (MBTA), which imposes strict criminal liability on any party who “takes” migratory birds, has garnered significant attention.¹ Because increasing numbers of migratory birds will be taken as wind projects multiply, the

¹ See Alex Arensberg, Note, *Are Migratory Birds Extending Environmental Criminal Liability?*, 38 *ECOLOGY L.Q.* 427, 435 (2011).

MBTA's strict prohibitions on take stand to create significant obstacles for the future of wind energy in this country.²

The most significant obstacle that the MBTA presents, however, may not be the criminal penalties it imposes for take. Rather, the greatest obstacle that the MBTA presents may be the uncertainty that surrounds the breadth of its take provisions. While courts have traditionally construed violations of the MBTA as strict liability offenses, some courts have recently refused to hold individuals strictly liable for incidentally taking birds in the course of lawful commercial activities.³ These latter courts have questioned whether the MBTA was intended to penalize take beyond the context of hunting and baiting, and have balked at holding actors criminally liable for activities in which they did not intend to take birds.⁴ At the heart of the courts' disagreement are concerns over constitutional due process and whether holding individuals strictly liable for taking birds in all circumstances provides fair notice of criminal liability.⁵ The courts' wrangling over when the MBTA applies and whether it can justifiably impose liability without proof of *mens rea* creates great uncertainty for developers trying to forecast and mitigate liability for future wind projects.

The courts are not solely responsible for the confusion surrounding the MBTA. The Legislative and Executive Branches have failed to construct a regulatory remedy that would enhance certainty for development and conservation interests as they have under other conservation statutes like the Endangered Species Act of 1973 (ESA). Under the ESA, "take" is defined more broadly than it is in the MBTA and includes most activities that kill, harm, or harass listed species.⁶ This broad definition allows developers to know that they will be liable for most takings and enables them to forecast with greater certainty their potential exposure to liability. Moreover, to resolve any residual uncertainty surrounding potential liability, Congress and executive agencies have created numerous programs under the ESA that assure limited take liability for developers who undertake specific conservation initiatives.⁷ Although the U.S. Fish and Wildlife Service's (USFWS) recently released Final Land-Based Wind Energy Guidelines (Guidelines) appear to be a similar effort to offer protection from take

2 See Victoria Sutton & Nicole Tomich, *Harnessing Wind Is Not (By Nature) Environmentally Friendly*, 22 PACE ENVTL. L. REV. 91, 95–96 (2005).

3 United States v. Brigham Oil & Gas, 840 F. Supp. 2d 1202, 1205 (D.N.D. Jan. 17, 2012) (concluding "lawful commercial activity which may indirectly cause the death of migratory birds does not constitute a federal crime."); United States v. Chevron USA, Inc., 2009 WL 3645170, at *5 (W.D. La. Oct. 30, 2009) (refusing to apply the MBTA's strict liability for Chevron's commercial activities); United States v. Ray Westall Operating, Inc., 2009 WL 8691615, at *7 (D.N.M. Feb. 25, 2009) (finding "it is highly unlikely that Congress intended to impose criminal liability on every person that indirectly causes the death of a migratory bird.").

4 See *Ray Westall Operating*, 2009 WL 891615 at *7.

5 See United States v. Apollo Energies, Inc., 611 F.3d 679, 689 (2010) (considering whether the MBTA gave fair notice according to due process).

6 16 U.S.C. § 1538(a)(1)(B) (2012); *Id.* at § 1532(19) (defining "take").

7 See *Endangered Species Program*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/endangered/> (last visited July 21, 2012) (providing links to descriptions of various initiatives that promote collaboration between landowner and the government, including Habitat Conservation Plans and Safe Harbor Agreements).

liability under the MBTA⁸, the Guidelines fail to adequately mitigate the vagueness surrounding the applicability of the MBTA's take provisions because they do not offer concrete assurances that USFWS will not pursue actions for take against developers who comply with the Guidelines. The Guidelines' failure to provide assurances comparable to those offered under the ESA is terminal to their own effectiveness because only with such assurances can developers know that their compliance will shield them from liability, regardless of the courts' confusion over when the MBTA take provisions apply.

This note focuses on the concept of take under both the MBTA and the ESA. A comparison of the two statutes demonstrates the split between the courts over the breadth of the MBTA's take provisions, and suggests ways the Final Guidelines for Land-Based Wind Energy could be amended to help provide clarity on the reach of the MBTA. Part I of the Note compares the breadth and clarity (or lack thereof) of the MBTA's take provisions to the ESA's take provisions, and argues that, while courts have traditionally interpreted violations of the MBTA as public welfare offenses, the courts are currently divided on the scope of the MBTA's take provisions because of due process concerns. Part II of the Note demonstrates how the uncertainty over take in the MBTA hampers development and conservation interests by applying both the MBTA and the ESA to a case. Part III compares Habitat Conservation Plans (HCPs) under the ESA to the USFWS's recently released Final Land-Based Wind Energy Guidelines. This comparison shows that, while HCPs alleviate some of the uncertainty concerning liability under the ESA, the Guidelines fail to address uncertainty about take liability under the MBTA. Part IV concludes with recommendations to help resolve the unpredictable application of the MBTA and to enhance the effectiveness of the Guidelines.

I. THE TAKE PROVISIONS

A. THE ENDANGERED SPECIES ACT

Congress passed the Endangered Species Act of 1973 to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of [U.S. treaties and conventions with other nations].⁹ The ESA enables the Secretary of the Interior to identify and list endangered and threatened species.¹⁰ It imposes various duties on government agencies and private parties in order to protect those species and promote their recovery.¹¹

8 U.S. FISH AND WILDLIFE SERV., U.S. FISH AND WILDLIFE SERVICE LAND BASED WIND ENERGY GUIDELINES (Mar. 23, 2012), *available at* http://www.fws.gov/windenergy/docs/WEG_final.pdf.

9 16 U.S.C. § 1531(b).

10 *Id.* § 1533.

11 *See id.* §§ 1533, 1538.

1. THE ESA “TAKE” PROVISIONS

The ESA’s most prominent provision prohibits the “taking” of listed species by any actor, private or public.¹² In the ESA, *take* is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”¹³

Section 11 of the ESA imposes civil and criminal liability for any “take” of listed species.¹⁴ A person is strictly liable for each take and may be assessed a civil penalty of up to \$500.¹⁵ A person can also be assessed a civil penalty of up to \$25,000 for knowingly violating the ESA.¹⁶ Similarly, a person who knowingly violates the ESA’s take provisions will be assessed a criminal penalty of up to \$50,000 and will be subject to imprisonment for not more than a year.¹⁷ Even though the ESA can apply to many different activities, its criminal provisions are rarely invoked.¹⁸ Traditionally, courts interpreted take under the ESA as a general intent crime, requiring proof only that a violator knew that he was taking an animal and not that he was taking a listed species;¹⁹ however, an executive order now requires that prosecutors only pursue criminal penalties when there is evidence that a defendant knew the biological identity of the taken animal, making criminal prosecution less common.²⁰

2. CONSTRUING THE ESA’S PROHIBITION ON TAKE

Congress consciously defined “take” in “the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.”²¹ Regulations implementing the ESA define “take” broadly to include acts that “harass” and “harm” a species, and both “harass” and “harm” are defined broadly in the regulations to include acts that indirectly disrupt normal or essential behavioral patterns.²²

12 *Id.* § 1538. This provision actually only prohibits the taking of species listed as endangered, but the implementing regulations extend the prohibitions on take to “threatened” species as well. 50 C.F.R. § 17.31(a) (2011).

13 *Id.* § 1532(19).

14 *Id.* § 1540.

15 16 U.S.C. § 1540 (2012). (“Any person who otherwise violates any provision of this chapter, or any regulation, permit, or certificate issued hereunder, may be assessed a civil penalty by the Secretary of not more than \$500 for each such violation.”).

16 *Id.* § 1540(a)(1).

17 *Id.* § 1540(b)(1). Depending on what provisions of § 1538 a person violates, the potential cap for a criminal penalty will be either \$25,000 or \$50,000, and the possible time for imprisonment will also be limited to either six months or one year. *Id.*

18 Marshall Silverberg & Ethan Carson Eddy, *Prosecuting Criminal Violations of the Endangered Species Act*, U.S. ATT’YS BULL., July 2011, at 47. The authors note that the government often relies on other statutes with harsher criminal provisions when seeking criminal penalties, but may rely upon the ESA criminal provisions when no other statute would permit prosecution. *Id.*

19 *See id.* at 49.

20 Deborah Schoch, *Policy Limits Endangered Species Act Prosecutions*, L.A. TIMES, June 22, 2003, <http://articles.latimes.com/2003/jun/22/nation/na-species22>.

21 S. REP. NO. 93-307 (1973), reprinted in 1973 U.S.C.C.A.N. 2989, 2995, 1973 WL 12683.

22 50 C.F.R. § 17.3 (2012).

The Supreme Court has affirmed that these broad definitions of “harm” and “take” can justifiably encompass both direct and indirect injuries to species.²³ In a concurring opinion that has come to define the breadth of “take” under the ESA, Justice O’Connor clarified that “harm” does not apply to speculative harm, but “significant habitat modification that causes actual death or injury to identifiable protected animals.”²⁴ She also noted that the civil penalty provisions of the ESA may impose strict liability, but opined that a party should only be held liable if their habitat-modifying actions proximately cause death or injury to protected animals.²⁵ Thus, liability for take attaches to most activities that harm or kill endangered species, as long as the prosecution can prove that the activity actually and proximately caused take of a listed species. Making liability contingent upon proving proximate cause injects an element of unpredictability into the liability calculus because there is little guidance on what courts may consider foreseeable.

B. THE MIGRATORY BIRD TREATY ACT

The MBTA is one of United States’ oldest conservation statutes. It was passed in 1918 to enact a treaty with Canada.²⁶ Three similar treaties were passed with Mexico,²⁷ Japan,²⁸ and the Soviet Union.²⁹ The treaties all sought to protect birds that migrated across country borders for various reasons. Some nations wished to protect the birds as a food supply or as predators of insects, and others sought to preserve them for their sporting, commercial, and aesthetic value.³⁰ Legislators who enacted the convention with Canada also enunciated numerous reasons that the country would want to protect migratory birds. They suggested that migratory birds were both a food source and also ingested insects that depleted crops during times of war.³¹ They also argued that the country should maintain stable populations of game birds for hunters.³² Whatever the driving

23 *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 701–02 (1995).

24 *Id.* at 708–09 (O’Connor, J., concurring).

25 *Id.* at 713. (“In my view, then, the ‘harm’ regulation applies where significant habitat modification, by impairing essential behaviors, proximately (foreseeably) causes actual death or injury to identifiable animals that are protected under the Endangered Species Act.”).

26 Migratory Bird Treaty Act, ch. 128, §2, 40 Stat. 755 (1918) (codified as amended at 16 U.S.C. §§ 703–712 (2012)).

27 Convention between the Government of the United States of America and Mexico for the Protection of Migratory Birds and Game Mammals, Feb. 7, 1936, 50 Stat. 1311.

28 Convention between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and their Environment, March 4, 1972, 25 U.S.T. 3329.

29 Convention between the United States of America and the Union of the Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, Nov. 19, 1976, 29 U.S.T. 4647.

30 Larry Martin Corcoran & Elinor Colbourn, *Shocked, Crushed and Poisoned: Criminal Enforcement in Non-Hunting Cases Under the Migratory Bird Treaties*, 77 DENV. U. L. REV. 359, 362 (1999).

31 56 Cong. Rec. 7357 (1917) (statement of Rep. Fess); 55 Cong. Rec. 4400 (1917) (statement of Sen. McLean); 56 Cong. Rec. 7362 (1917) (statement of Sen. Stedman).

32 56 Cong. Rec. 7364 (1918) (statement of Rep. Huddleston).

force behind the MBTA, it is clear that the main objective of the MBTA and the treaties was to conserve migratory bird populations.

1. THE MBTA “TAKE” PROVISIONS

The language of the MBTA is quite broad. It is unlawful to “at any time, by any means or in any manner, . . . pursue, hunt, take, capture, kill, attempt to take, capture, or kill . . . any migratory bird”³³ The accompanying regulations define “take” as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.”³⁴ Notably, neither the regulations nor the statute include the broad terms “harass” or “harm” as they are defined in the ESA.³⁵ “Kill” is not defined in the statute or the regulations.

Although courts have traditionally read the MBTA as a strict liability statute, the MBTA does not expressly state that it imposes strict liability. Rather, it provides that

[A]ny person, association, partnership, or corporation who shall violate any provisions . . . of this subchapter, or who shall violate or fail to comply with any regulation made pursuant to this subchapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$15,000 or be imprisoned not more than six months, or both.³⁶

The statute also makes it a felony, punishable by a fine of \$2,000 or imprisonment of up to two years to knowingly “take by any manner whatsoever any migratory bird *with intent* to sell, offer to sell, barter or offer to barter such bird” or “sell, offer for sale, barter or offer to barter, any migratory bird.”³⁷ The MBTA imposes only criminal penalties.³⁸

2. THE CONTROVERSY OVER THE SCOPE OF THE MBTA

The breadth of the MBTA’s language has created controversy since the statute’s inception.³⁹ Though the statute broadly prohibits taking birds in “any manner,” the drafters did not agree whether this broad prohibition was intended to address only recreational and commercial hunters,⁴⁰ or whether it also included non-hunting or baiting activities within its prohibitions.⁴¹ Indeed, a recurring argument in the debate over the bill revolved around whether the MBTA’s language was broad enough to penalize a boy

33 16 U.S.C. § 703(a) (2012).

34 50 C.F.R. § 10.12 (2012).

35 See *Seattle Audubon Soc’y v. Evans*, 952 F.2d 297, 303 (1991) (noting that the differences between the ESA and the MBTA definition of *take* are “distinct and purposeful”).

36 16 U.S.C. § 707(a). The types of species that qualify as “migratory birds” are defined by the individual treaties formed between the United States, Great Britain (Canada), Mexico (“Mexican states”), Japan, and Russia. 16 U.S.C. § 715j. See also 50 C.F.R. §10.13 (listing over 925 species that qualify as “migratory birds”).

37 16 U.S.C. § 707(b) (emphasis added).

38 See *id.* § 707.

39 Corcoran & Colbourn, *supra* note 30, at 385.

40 See *United States v. Moon Lake Elec. Ass’n, Inc.*, 45 F. Supp. 2d 1070, 1080 (D. Colo. 1999) (providing an exhaustive treatment of the legislative history of the act).

41 *Id.* at 1080–81.

who tossed a stone and killed a robin.⁴² The statutory history similarly does not elucidate the statute's intended scope or whether it makes take a strict liability offense. As originally enacted, the MBTA did not differentiate between misdemeanor and felony convictions for take.⁴³ The Act was amended in 1960 to add a felony take provision, and imposed strict liability for both misdemeanor and felony violations.⁴⁴ The amendments to the MBTA drew a distinction between recreational and commercial hunters, confirming to some extent the view that the MBTA was aimed at hunters specifically.⁴⁵ After some courts questioned whether imposing felony liability under the act comported with due process,⁴⁶ Congress amended the felony provisions to require that a violator knowingly take a migratory bird to be held liable.⁴⁷ Congress did not revise the misdemeanor provisions of the act when it amended the MBTA again in 1986, apparently content with courts' interpretations that had imposed strict liability for incidental and unintended takes.⁴⁸ Thus, while the MBTA has been amended over time to respond to courts' interpretation of the statute, these amendments have not expressly clarified which acts the MBTA criminalizes and what degree of fault courts look for before imposing penalties.

3. CONSTRUING THE MBTA'S PROHIBITION ON TAKE

Because the statute's text, legislative history, and statutory history provide no clear guidance on how the MBTA should apply to all takings of migratory birds, courts have been forced to construe the MBTA to determine its scope and meaning.⁴⁹ Courts initially construed takes under the MBTA as public welfare offenses, but, over time, the Supreme Court has refined its jurisprudence on public welfare offenses to include only those offenses that are so dangerous and offensive that a person can be presumed to know that his activities are likely subject to government regulation.⁵⁰ Because many activities only indirectly take birds and are not so dangerous that a person could be considered presumptively aware of possible regulation, courts have struggled to deter-

42 *Id.* at 1081 (citing 55 Cong. Rec. 4399 (1917) (statement of Sen. Reed saying that the statute "absolutely [prohibits] the killing of game anywhere under any circumstances").

43 Migratory Bird Treaty Act, 40 Stat. 755 (1918) (codified as amended at 16 U.S.C. §§ 703–712 (2012)).

44 Migratory Bird Treaty Act Amendment of 1960, Pub. L. No. 86-732, 74 Stat. 866.

45 Benjamin Means, Note, *Prohibiting Conduct, Not Consequences: The Limited Reach of the Migratory Bird Treaty Act*, 97 MICH. L. REV. 823, 832 (1998) (citing Migratory Bird Treaty Act Amendment of 1960, Pub. L. No. 86-732, 74 Stat. 866).

46 See *United States v. Wulff*, 758 F.2d 1121 (6th Cir. 1985); *United States v. St. Pierre*, 578 F. Supp. 1424 (D.S.D. 1983); *but see United States v. Engler*, 806 F.2d 425 (3d Cir. 1986).

47 Emergency Wetlands Resources Act of 1986, Pub. L. 99-645 § 501, 100 Stat. 3582. A history of the amendments can be found at <http://www.fws.gov/laws/lawsdigest/migtrea.html>.

48 S. REP. NO. 99-445, at 16 (1986), *reprinted in* 1986 U.S.C.C.A.N. 6113, 6128 ("Nothing in this amendment is intended to alter the 'strict liability' standard for misdemeanor prosecutions under 16 U.S.C. 707(a), a standard which has been upheld by many Federal court decisions.").

49 See, e.g., *Newton Cnty. Wildlife Ass'n v. U.S. Forest Service*, 113 F.3d 110 (8th Cir. 1997); *United States v. Apollo Energies, Inc.*, 611 F.3d 679 (10th Cir. 2010).

50 *United States v. Freed*, 401 U.S. 601, 609 (1971).

mine whether MBTA offenses can still legitimately be labeled public welfare offenses.⁵¹ This struggle has split the courts, with some arguing that the MBTA imposes strict liability for most takings and others insisting that that MBTA's prohibitions apply only to certain limited activities.⁵²

a. STRICT LIABILITY

Courts have traditionally required a finding of *mens rea*, or an evil-meaning or guilty mind, with respect to all the material elements of a crime before convicting a defendant.⁵³ This requirement was straightforward in the context of common-law crimes like rape, burglary, and homicide because the acts "were so antisocial . . . that anyone aware of engaging in [them] was aware of doing wrong."⁵⁴ Over time, however, legislatures developed statutes that did not require proof of *mens rea*.⁵⁵ Rather than punish acts that were judged to be antisocial and evil, these statutes focused on regulating people's activities to achieve "some social betterment."⁵⁶ While some of these regulatory statutes imposed civil liability for violations, others, in an attempt to make regulation more effective, made a violator criminally liable without requiring proof of *mens rea* for all or some of the material elements of the crime.⁵⁷

In the beginning of the twentieth century, the Supreme Court began to construe statutes that, like the MBTA, made certain acts criminal without specifying a *mens rea* requirement. The Court held that some of these statutes made a violator strictly liable for his crime, reasoning that the state could prohibit certain acts (dubbed "public welfare offenses") without proof of an offender's ill intent because of the risk these activities posed to the public health and welfare.⁵⁸ Because the offenders often stood in "responsible relation to a public danger," they had a duty to act in a certain manner regardless of whether they were aware that they were committing wrong or not.⁵⁹

Eventually, the Court retreated from its earlier broad holdings and began to limit the kinds of activities that would qualify as public welfare offenses. The Court held that regulatory crimes which adopted criminal offenses from the common law incorporated the common law tradition of assuming a *mens rea* requirement.⁶⁰ In *Lambert v. California*, the Court refused to uphold a statute that held convicted felons strictly and crimi-

51 See, e.g., *United States v. Brigham Oil & Gas*, 840 F. Supp. 2d 1202 (D.N.D. 2012); *United States v. Reese*, 27 F. Supp 833 (D. Tenn. 1939).

52 See, e.g., *Apollo Energies, Inc.*, 611 F.3d 679 (imposing strict liability for takes caused by oil drilling); *Seattle Audubon Soc'y v. Evans*, 952 F.2d 297 (9th Cir. 1991) (finding that the MTBA did not apply to some indirect takes caused by timber harvest).

53 Susan F. Mandiberg, *The Dilemma of Mental State in Federal Regulatory Crimes: The Environmental Example*, 25 ENVTL. L. 1165, 1177 (1995).

54 *Id.*

55 See *id.* at 1178.

56 See *Morissette v. United States*, 342 U.S. 246, 254 (1952); *United States v. Balint*, 258 U.S. 250 (1922); *United States v. Dotterweich*, 320 U.S. 277, 280 (1943); Lawrence Friedman & H. Hamilton Hackney III, *Questions of Intent: Environmental Crimes and "Public Welfare Offenses,"* 10 VILLANOVA ENVTL. L.J. 1, 6-7 (1999).

57 See *Corcoran & Colbourn*, *supra* note 30, at 377. See also *Morissette*, 342 U.S. at 245-46.

58 *Balint*, 258 U.S. at 252.

59 *Dotterweich*, 320 U.S. at 281.

60 *Morissette*, 342 U.S. at 261-62.

nally liable when they failed to register after staying in Los Angeles for more than five days.⁶¹ The Court asserted that it would violate the due process requirement of notice to impose strict liability on a defendant when her acts were wholly passive and were not “under circumstances that should alert the doer to the consequences of his deed.”⁶²

The Court continued to refine its public welfare doctrine over time, applying it selectively to uphold strict criminal liability for those statutes that regulated dangerous or harmful items.⁶³ In *United States v. Freed*, the Court held that a statute which criminalized the possession of unregistered hand grenades did not require proof that the defendants knew the grenades were unregistered because hand grenades were so dangerous and offensive that “the likelihood of governmental regulation . . . is so great that anyone must be presumed to be aware of it.”⁶⁴ By contrast, in *Liparota v. U.S.*, the Court held that a statute that prohibited the purchase of food stamps must also require proof that the defendant knows he is violating the law.⁶⁵ Noting that criminal offenses that did not require proof of *mens rea* were “generally disfavored,”⁶⁶ the Court denied that purchasing food stamps was a public welfare offense on the grounds that it was not an activity that would put one on notice of possible criminal liability.⁶⁷

In *Staples v. United States*, the Court once again revised its approach to public welfare offenses when it struck down the conviction of a defendant for his failure to register an automatic rifle.⁶⁸ In determining whether the statute requiring registration created a public welfare offense, the Court noted that public welfare offenses often regulate “harmful or injurious items” that put the offender in a responsible relation to a public danger and alert him to the probability of strict regulation.⁶⁹ Citing *Liparota*, the Court also noted that it avoided construing a statute to dispense with *mens rea* when doing so would criminalize a range of apparently innocent conduct.⁷⁰ The Court went on to find that, even though guns are dangerous, they are so commonplace that possessing one would not

61 *Lambert v. California*, 355 U.S. 225, 226–27 (1957).

62 *Id.* at 228.

63 See Arensberg, *supra* note 1, at 430 (defining the public welfare doctrine as a method of statutory construction to justify strict liability); Friedman & Hackney, *supra* note 56, at 9 (arguing that the Court’s public welfare jurisprudence establishes “that Congress may create reduced-intent crimes within the realm of regulatory offenses and that the public welfare nature of these offenses justifies a rule that reduced intent does not require knowledge of an act’s illegality”).

64 *United States v. Freed*, 401 U.S. 601, 616 (1971) (Brennan, J., concurring). See also *United States v. Int’l Minerals & Chem. Corp.*, 402 U.S. 558, 560 (1971) (holding a shipper strictly liable with regards to its knowledge of a regulation requiring it to show on papers that it was shipping hazardous materials because when “dangerous or deleterious devices or products or obnoxious waste materials are involved, the probability of regulation is so great that anyone who is aware that he is in possession of them or dealing with them must be presumed to be aware of the regulation”).

65 *Liparota v. United States*, 471 U.S. 419, 434 (1985).

66 *Id.* at 426.

67 *Id.*

68 *Staples v. United States*, 511 U.S. 600, 602–04 (1994).

69 *Id.* at 607.

70 *Id.* at 610.

necessarily alert a person to the likelihood of strict liability.⁷¹ Thus, the defendant could not be held liable for failure to register his weapon if he was unaware that his gun was an automatic rifle and therefore subject to regulation.⁷²

b. STRICT LIABILITY AND THE SCOPE OF THE MBTA

Following *Staples*, the Court's jurisprudence distinguishes between public welfare offenses, in which the items regulated are so dangerous and uncommon that a defendant can be expected to know that they would be regulated, and those innocent activities that would not put a defendant on notice of probable regulation.⁷³ In these latter cases, the Court has construed statutes to require proof that the defendant knows he is violating the statute to remain consistent with due process requirements of notice.⁷⁴ While courts initially labeled take under the MBTA as a public welfare offense,⁷⁵ it is clear that some activities that take migratory birds do not involve the regulation of harmful items or activities that are injurious to the public health or safety.⁷⁶ Indeed, the actual act criminalized by the MBTA, the taking of birds, is often an unintentional consequence of numerous everyday activities, and even if takings are foreseeable, parties often do not anticipate being subject to criminal liability.⁷⁷ It is therefore questionable whether the MBTA can legitimately impose strict liability on those who take migratory birds by engaging in these activities.

Despite the apparent inapplicability of the public welfare doctrine, some courts maintain that the MBTA imposes strict liability for all forms of take.⁷⁸ These courts hold parties liable even when takings occur incidentally as part of otherwise lawful activities, and justify their holdings by relying on various concepts intended to ameliorate the harshness of holding parties strictly liable.⁷⁹ Other courts have balked at attempts to make incidental take by lawful activities criminal, and have questioned whether the MBTA should apply to takings beyond those that occur during hunting and baiting.⁸⁰ In general, the courts split based on the context in which take occurred and whether the offenders' actions were directed at taking birds.

71 *Id.* at 610–11.

72 *Id.* at 619–20.

73 Mandiberg, *supra* note 53, at 1203–04.

74 Lambert v. California, 355 U.S. 225, 229–30 (1957).

75 See United States v. Corbin Farm Serv., 444 F. Supp. 510, 535–36 (E.D. Cal. 1978); United States v. Reese, 27 F. Supp. 833, 835 (W.D. Tenn. 1939).

76 Mandiberg, *supra* note 53, at 1215–16.

77 United States v. Brigham Oil & Gas, 840 F. Supp. 2d 1202, 1212–14 (D.N.D. 2012).

78 See *e.g.*, United States v. FMC Corp., 572 F.2d 902 (2d Cir. 1978); United States v. Moon Lake Elec., Ass'n, Inc., 45 F. Supp. 2d 1070 (D. Colo. 1999); United States v. Apollo Energies, Inc., 611 F.3d 679 (10th Cir. 2010).

79 FMC Corp., 572 F.2d at 908. The courts' reticence to read a mens rea requirement into the MBTA misdemeanor provisions may be due to the fact that the MBTA misdemeanor provisions apply to all violations of the MBTA, and not just take. 16 U.S.C. § 707 (2012). The courts may not disagree about making possession of migratory birds parts or their eggs criminal because those cases at least involve some intentional act of possessing. *Corbin Farm Serv.*, 444 F. Supp. at 532. Take, however, can be unintentional or just an incidental product of an activity that is not directed at birds at all. *Apollo Energies*, 611 F.3d at 684.

80 See *Brigham Oil*, 849 F. Supp. 2d. at 1211–13.

(1) EARLY CASES: *U.S. v. REESE*, HUNTING AND BAITING CASES

One of the first cases to construe the MBTA was *U.S. v. Reese*, in which the court affirmed the conviction of defendants for baiting a field to lure mourning doves.⁸¹ In reaching its holding, the court relied expressly on early public welfare offense cases to find that because Congress was regulating for “public policy” it had omitted a *mens rea* requirement for take violations.⁸² It noted that Congress would not likely impose the extreme difficulty on the government of proving the defendant’s knowledge with regards to the baiting,⁸³ and that the harshness of the penalty was alleviated by the fact that the court had discretion to lighten the penalty.⁸⁴ Courts have generally followed the court’s reasoning in *Reese* in other cases that involve hunting or baiting.⁸⁵

(2) POISONING AND INDIRECT TAKES

Beginning in the 1970s, the courts began to consider cases that involved indirect and incidental takings of birds rather than the more direct and intentional takings by hunting or baiting.⁸⁶ The courts have generally upheld strict liability where migratory birds have been poisoned. Perhaps responding to the Supreme Court’s revised public welfare doctrine in *Freed*, they have found that the dangerous nature of poisons puts the offender on notice that he would need to exercise care to protect the environment and the public.⁸⁷ Thus, a pesticide producer could be held liable for take when the wastewater it stored in an open pond killed migratory birds, even though the producer was not initially aware that its waste would cause death.⁸⁸ Because the producer did know the danger that its pesticides posed to living organisms, the court held the producer liable for its failure to prevent the chemicals from reaching the pond.⁸⁹

(3) HABITATION MODIFICATION AND TIMBER HARVEST

In contrast to the Supreme Court’s rulings under the ESA, some courts have refused to hold parties strictly liable for take when their actions modify migratory birds’

81 *United States v. Reese*, 27 F. Supp. 833 (W.D. Tenn. 1939).

82 *Id.* at 835.

83 *Id.*

84 *Id.*

85 See *Cerritos Gun Club v. Hall*, 96 F.2d 620 (9th Cir.1938); *Reese*, 27 F. Supp 833; see also *FMC Corp.*, 572 F.2d at 906. (listing hunting cases brought under the MBTA). Some courts have read a *mens rea* requirement of “knowing” or “should have known” in baiting cases, however, arguing that if hunters could be penalized without knowledge of illegal baiting occurring nearby, then the regulations would effectively make criminal conviction a necessary consequence of hunting. *United States v. Delahoussaye*, 573 F.2d 910, 912–13 (5th Cir. 1978). See also *United States v. Sylvester*, 848 F.2d 520 (5th Cir. 1988) (citing *Delahoussaye* for the assertion that the Fifth Circuit requires a minimum level of scienter for an offense under the MBTA).

86 *Corcoran & Colbourn*, *supra* note 30, at 385–86.

87 *United States v. Corbin Farm Serv.*, 444 F. Supp. 510, 536 (E.D.Cal. 1978) (holding that criminal penalties can be imposed for violating the MBTA even if the defendant did not intend to kill migratory birds).

88 *United States v. FMC Corp.*, 572 F.2d 902, 908 (1978).

89 *Id.*

habitat.⁹⁰ In *Seattle Audubon Soc'y v. Evans*, the Ninth Circuit found that the MBTA and its implementing regulations proscribed “physical conduct of the sort engaged in by hunters and poachers,” and did not apply to timber harvest that led to indirect take through “habitat modification or destruction.”⁹¹ The Eighth Circuit reached a similar conclusion in *Newton County Wildlife Ass'n v. U.S. Forest Service*, where it held that “[s]trict liability may be appropriate when dealing with hunters and poachers. But it would stretch this 1918 statute far beyond the bounds of reason to construe it as an absolute criminal prohibition on conduct such as timber harvesting, that *indirectly* results in the death of migratory birds.”⁹²

(4) INDIRECT TAKE BY COMMERCIAL ACTIVITY

The most recent cases brought under the MBTA concern indirect take of migratory birds by lawful commercial activity. These cases build on the split that began with the habitat modification and poisoning cases and demonstrate more clearly the constitutional concerns that arise when parties are held strictly liable for takings under the MBTA.⁹³

Some courts have continued to apply strict liability even when take is incidental to lawful commercial activity. For instance, the U.S. District Court for the District of Colorado held an electrical distribution cooperative strictly liable for the death and injury of birds after it failed to install inexpensive equipment on its power poles that would have prevented the take.⁹⁴ In a notable departure from earlier cases, however, the court devised a new proximate cause analysis that mirrored O'Connor's concurrence in *Sweet Home*,⁹⁵ holding that even if the MBTA imposed strict liability, the prosecution still needed to prove that the distributors' power lines were both the actual and proximate cause of the birds' deaths.⁹⁶ The Tenth Circuit adopted this reasoning later in *U.S. v. Apollo Energies, Inc.*, where it found oil developers liable for take after migratory birds had been found lodged in their oil drilling equipment.⁹⁷ Looking to the constitutional constraints recognized in *Staples* and *Lambert*, the court noted that holding developers strictly liable did raise due process concerns about fair notice,⁹⁸ but the court concluded

90 See, e.g., *Newton Cnty. Wildlife Ass'n v. U.S. Forest Serv.*, 113 F.3d 110 (8th Cir. 1997); *Seattle Audubon Soc'y v. Evans*, 952 F.2d 297 (1991).

91 *Seattle Audubon Soc'y*, 952 F.2d at 302–03.

92 *Newton Cnty.*, 113 F.3d at 115. *But see* Corcoran & Colbourn, *supra* note 30, at 390 (explaining that some courts have upheld strict liability in cases where timber harvest directly took a migratory bird that inhabited a felled tree).

93 See *United States v. Apollo Energies Inc.*, 611 F.3d 679 (10th Cir. 2010); *United States v. Moon Lake Electric Ass'n, Inc.*, 45 F. Supp. 2d 1070 (D. Colo. 1999).

94 *Moon Lake Electric Ass'n*, 45 F. Supp. 2d 1070.

95 *Id.* at 1077–78.

96 *Id.* at 1085 (stating that proximate causation was “an important and inherent limiting feature of the MBTA's misdemeanor provision”).

97 *Apollo Energies*, 611 F.3d 679.

98 *Id.* at 687.

that because the defendants' actions proximately caused the take of migratory birds, they could be held criminally liable consistent with the Constitution.⁹⁹

Other courts have refused to apply strict liability for take by commercial activity, holding that the law was not intended to criminalize acts that only indirectly and unintentionally cause the take of birds.¹⁰⁰ These courts have held that the MBTA only applies to intentional acts like hunting and baiting, and have avoided constitutional due process questions by restricting the scope of the statute to exclude most activities that incidentally take migratory birds.¹⁰¹

(5) LIABILITY FOR TAKE IS UNCERTAIN UNDER THE MBTA IN CONTRAST TO THE ESA

As discussed above, courts have attempted to define liability for take under the MBTA to avoid the constitutional problems that come with holding parties strictly liable for activities that take birds, but their different approaches to interpreting the MBTA have made it difficult to predict the determination of liability for take. When a court applies the MBTA to a new activity that has incidentally taken a migratory bird, parties do not know whether the court will hold them strictly liable, whether the court will require proof of proximate cause and foreseeability, or whether the court will simply hold that the specific form of take under consideration does not fall under the MBTA. Adding to this uncertainty over liability are the various concepts courts have developed to justify strict liability for take. As noted above, some courts have held that a defendant is only liable if he proximately caused the take.¹⁰² Other courts have insisted that strict liability under the MBTA is legitimate because the penalties are minor and the court and the prosecution exercise discretion when enforcing the MBTA.¹⁰³ Arguably, none of these concepts alleviates constitutional concerns over fair notice: whether a take was foreseeable does not mean that the party foresaw that his acts would subject him to criminal liability, and whether a prosecutor exercises his discretion after the fact does nothing to put a party on notice of potential criminal liability. Thus, the courts' various attempts to address questions about due process and strict liability have only created greater uncertainty over how far a court may extend the criminal penalties of the MBTA and what concepts it may rely upon when determining a party's liability under the MBTA.

This uncertainty contrasts sharply with the general predictability of liability under the ESA. Because the definition of take is so broad under the ESA, violators know that they can be held liable for most activities that actually and foreseeably take listed spe-

99 *Id.* Part of the reason that the defendants could foresee the eventual takes was because the FWS had warned them that their equipment was taking or could take migratory birds unless the cavities in the equipment were covered. *Id.* at 691.

100 *See, e.g.,* United States v. Brigham Oil & Gas, L.P., 840 F. Supp. 2d 1202 (D.N.D. 2012); United States v. Chevron USA, Inc., 2009 WL 3645170 (W.D. La. Oct. 30, 2009); United States v. Ray Westall Operating, Inc., 2009 WL 8691615 (D.N.M. Feb. 25, 2009).

101 *See Brigham Oil*, 840 F. Supp. 2d at 1213; *Ray Westall*, 2009 WL 8691615 at *3.

102 *See United States v. Moon Lake Elec. Ass'n, Inc.*, 45 F. Supp. 2d 1070, 1077 (D. Colo. 1999); *Apollo Energies*, 611 F.3d at 690.

103 *See United States v. Reese*, 27 F. Supp. 833, 835 (W.D.Tenn. 1939); *United States v. Corbin Farm Serv.*, 444 F. Supp. 510, 535 (E.D.Cal. 1978).

cies. Unlike the MBTA, where questions of liability stem from uncertainty over whether the statute can even be applied to a given situation, questions over liability under the ESA generally involve whether a party's acts were the proximate cause of a listed species' death or whether the party's acts will harm a given species.

II. THE IMPLICATIONS OF UNPREDICTABILITY

The implications of unpredictable liability for take can be demonstrated by applying both the MBTA and the ESA to the facts of a recent case. *Brigham Oil* was decided by the United States District Court for the District of North Dakota,¹⁰⁴ and involved three oil companies charged with Class B misdemeanors after migratory birds died from exposure to their drilling fluids.¹⁰⁵ By considering what the court: (1) actually held, (2) could have held, and (3) would have held if it had applied the ESA, the relative clarity of how ESA take provisions allow parties to assess and plan for future liability stands in contrast to how the uncertainty of the MBTA's take provisions frustrates development and conservation by obscuring the amount of mitigation efforts that a party must undertake to avoid liability.

A. UNDER THE MBTA

1. WHAT HAPPENED

The court found that the developers did not violate the MBTA because the MBTA only applied to intentional acts like hunting and baiting.¹⁰⁶ Looking to the plain meaning of the word take¹⁰⁷ and the definition of take in the regulations,¹⁰⁸ the court concluded that both definitions included action verbs that denoted purposeful conduct.¹⁰⁹ Because the definitions in the statute and the regulations only referred to purposeful conduct, the court reasoned that the MBTA was "vague and ambiguous as it relates to criminal sanctions for lawful, commercial activity that may indirectly injure or kill migratory birds" and held that the rule of lenity required that it interpret ambiguous crimi-

¹⁰⁴ *Brigham Oil*, 840 F. Supp. 2d 1202.

¹⁰⁵ *Id.* at 1205. Two of the companies were charged with taking birds when they failed to place a net over a reserve pit where it was storing its drilling fluids. *Id.* at 1204–05. Though the companies were not required to net the pit under state law, two birds died from exposure to the chemicals in the pit. *Id.* Another company was charged with taking four migratory birds when its reserve pit overflowed into a nearby wetland. *Id.* at 1205. Apart from the take of migratory birds, each of the oil companies was lawfully conducting oil and gas exploration activities in North Dakota. *Id.* at 1203–04

¹⁰⁶ *Id.* at 1208.

¹⁰⁷ *Id.* at 1208–09. (“[T]o get into one’s hands or into one’s possession, power, or control by force or stratagem: . . . to get possession of (as fish or game) by killing or capturing . . .”) (citing WEBSTER’S THIRD NEW INT’L DICTIONARY (UNABRIDGED) 2329–30 (1986)).

¹⁰⁸ *Id.* at 1209 (“[T]o pursue hunt, shoot, wound, kill, trap, capture, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect”) (citing 50 C.F.R. § 10.12 (2012)).

¹⁰⁹ *Id.* at 1209. The court similarly concluded that the term “kill” is an action verb that denotes intentional behavior. *Id.* at 1212.

nal laws in favor of the defendants.¹¹⁰ It also cited *Seattle Audubon* and *Newton County* for the proposition that the MBTA is not meant to criminalize lawful commercial activity not directed at taking birds.¹¹¹

This interpretation of the MBTA has two major consequences. First, by holding that the MBTA only criminalizes conduct directed at birds like hunting or poaching, the court effectively read a *mens rea* requirement into the statute because hunting and baiting are inherently intentional acts.¹¹² Thus, though the court does not mention strict liability in its holding, its decision avoids the murky constitutional due process questions that other courts have faced because it avoids imposing criminal liability for unintentional and incidental takings.

Second, the court's holding not only reads in a *mens rea* requirement, but it restricts the MBTA's scope to preclude from possible liability take by lawful commercial activity.¹¹³ Such a broad holding forecloses the possibility that developers could be held liable for harming migratory birds, even if the harm was done knowingly and proximately caused bird deaths, as long as the activities were not intended to take birds.

2. WHAT COULD HAVE HAPPENED

Despite its assertion that *Newton County* mandated the district court's conclusion that take by lawful commercial activity could not be a crime under the MBTA,¹¹⁴ the court in *Brigham Oil* could have reached a different conclusion. *Newton County* focused primarily on the indirect and nonparticularized nature of the take (habitat modification) rather than on the fact that logging was a lawful commercial activity.¹¹⁵ In *Brigham Oil*, by contrast, the developers incidentally but directly took birds by exposing them to hazardous materials, similar to the defendants in *FMC* and *Corbin Farms*.¹¹⁶ The court could therefore have distinguished this case from *Newton* and held the oil developers strictly liable for take on the grounds that they were dealing with inherently dangerous materials and were "put on notice that they should exercise care to prevent injury."¹¹⁷

The consequences of this interpretation have already been discussed above. While it is consistent with traditional interpretations of the MBTA take provisions, this interpretation raises many of the constitutional concerns about fair notice that the courts have grappled with in the past, with the unfortunate side effect of discouraging lawful commercial activity.

3. THE IMPLICATIONS OF UNCERTAINTY

The fact that courts construing the MBTA could reach very different conclusions when faced with the exact same factual scenario creates great uncertainty for developers

110 *United States v. Brigham Oil & Gas, L.P.*, 840 F. Supp. 2d 1202, 1211–12 (D.N.D. 2012).

111 *Id.* at 1209–10.

112 *United States v. Moon Lake Elec. Ass'n.*, 45 F. Supp. 1070, 1077 (D. Colo. 1999).

113 *Brigham Oil*, 840 F. Supp. 2d at 1212.

114 *Id.* at 1211.

115 *See Newton Cnty. Wildlife Ass'n. v. U.S. Forest Serv.*, 113 F.3d 110, 115 (8th Cir. 1997).

116 *See Brigham Oil*, 840 F. Supp. 2d 1202 at 1211 (discussing birds' exposure to reserve oil pits and citing *FMC* and *Corbin Farms* as cases involving "indirect, unintentional commercial activity").

117 *United States v. Corbin Farm Serv.*, 444 F. Supp. 510, 536 (E.D. Cal. 1978).

and conservationists. This uncertainty impairs their ability to plan for future mitigation efforts and to enforce the MBTA. Developers who know that their activities will take migratory birds cannot be sure what kind of measures they will need to take to avoid potential liability. If they take reasonable precautions to prevent all foreseeable takings, they could theoretically still be held liable if a court holds them strictly liable for any unintended take. On the other hand, a developer could take reasonable precautions to prevent foreseeable takings, only to find that a court would have followed the reasoning in *Brigham Oil* and would not have held him liable for incidentally taking birds. Either way, a developer will lose any investment he has made in attempting to mitigate the impact of his activities. Moreover, his inability to assess potential liability will make it hard for him to predict future costs and secure financing for his projects.¹¹⁸

From a conservation and regulatory standpoint, the uncertainty surrounding the scope and scienter requirements of the MBTA raises questions about its usefulness as a conservation tool. If courts can reach conclusions as the court did in *Brigham Oil* and read activities that take migratory birds out of the scope of the MBTA, then the statute loses much of its power. This outcome is especially troublesome if one considers that the government relies upon the MBTA to reach actions and protect species that the ESA might not be able to.¹¹⁹

B. UNDER THE ESA

If a handful of endangered whooping cranes had perished in the reserve pits rather than widgeons and mallards in *Brigham Oil*, the liability of the developers would be more predictable. Take under the ESA includes most acts that directly and indirectly harm or harass an endangered species.¹²⁰ Assuming that whooping cranes were common in the area, the prosecution would probably have little difficulty establishing that the developers' activities here proximately caused the take of the birds. The developers would therefore be strictly liable for civil penalties of \$500 for each violation, and, if the developers knew that their activities would take the cranes, they could also be liable for civil penalties up to \$25,000 for each violation.¹²¹ The developers could be guilty of a Class A misdemeanor if they knew their actions would take the birds,¹²² and they could be assessed a criminal fine of up to \$50,000 and be imprisoned for up to a year.¹²³ The USFWS's current policy adds greater certainty to this situation because it ensures that USFWS will not pursue criminal fines unless violators are aware that the species they have taken is endangered.¹²⁴

As shown by the hypothetical case here, a party who takes an endangered species can generally predict that he will be liable under the ESA, but liability under the ESA

118 John Arnold McKinsey, *Regulating Avian Impacts Under the Migratory Bird Treaty Act and Other Laws: The Wind Industry Collides with one of its own, the Environmental Protection Movement*, 28 ENERGY L. J. 71, 88–89 (2007).

119 RASBAND ET AL., NATURAL RESOURCES LAW & POLICY 347 (Robert C. Clark et al. eds, 2nd ed. 2009).

120 *Babbitt v. Sweet Home Chapter of Cmty. for a Great Ore.*, 515 U.S. 687, 701–02 (1995).

121 16 U.S.C. § 1540(a) (2012).

122 Silverberg & Eddy, *supra* note 18, at 50.

123 16 U.S.C. § 1540(b).

124 Silverberg & Eddy, *supra* note 18, at 49.

can be unpredictable to the extent that it is hard to determine that an individual's activities proximately caused a species' death. To combat this unpredictability, the USFWS has provided different remedial programs under the ESA that a developer can undertake to limit his liability for even foreseeable take, and as developers take advantage of these programs, they can better predict the costs and efforts needed to move forward with their respective projects.

III. WIND ENERGY AND REGULATORY MEASURES

Courts have already concluded that the ESA will apply to wind projects that take endangered species.¹²⁵ Commentators have not agreed, however, whether the MBTA will apply to wind energy projects.¹²⁶ Moreover, even though the USFWS has indicated that takings by wind energy projects will be subject to criminal liability under the MBTA,¹²⁷ and even though a Clinton Administration executive order asserted that the MBTA covers both intentional and unintentional takes,¹²⁸ cases like *Apollo* and *Brigham Oil* show that the courts are still not convinced that the MBTA extends to incidental take by lawful activities.¹²⁹ Given how much attention has been directed at wind energy projects and their impact on birds and bats, most courts would probably find that developers could foresee migratory bird deaths. Whether the MBTA will apply to take by wind turbines will therefore likely depend on a court's interpretation of the statute.

The breadth of the MBTA's take provisions is not solely a matter of judicial determination. Experience with the ESA shows that the Executive and Legislative Branches can make liability more predictable for developers by offering different enforcement assurances in exchange for the developers' commitment to conservation initiatives. Habitat Conservation Plans (HCPs) and Incidental Take Permits (ITPs) are examples of programs that the government has offered that have advanced conservation goals while at the same time shielding developers from liability for take.¹³⁰ The USFWS's recently-released Final Land-Based Wind Energy Guidelines attempt to strike a similar balance between conservation and development interests under a number of statutes, including the MBTA, but because they do not offer comparable enforcement assurances to ITPs, they fail to resolve the uncertainty surrounding the MBTA.¹³¹

125 See, e.g., *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp.2d 540 (D. Md. 2009).

126 Meredith Blaydes Lilley & Jeremy Firestone, *Windpower, Wildlife, & the Migratory Bird Treaty Act*, 38 ENVTL. L. 1167, 1186 (2008).

127 U.S. FISH & WILDLIFE SERV., LAND-BASED WIND ENERGY GUIDELINES 6 (2012) [hereinafter GUIDELINES], available at http://www.fws.gov/windenergy/docs/WEG_final.pdf.

128 Lilley & Firestone, *supra* note 126, at 1186.

129 See *United States v. Apollo Energies, Inc.*, 611 F.3d 679 (10th Cir. 2010); *United States v. Brigham Oil & Gas, L.P.*, 840 F. Supp. 2d 1202 (D.N.D. 2012).

130 GUIDELINES, *supra* note 127, at 54.

131 *Id.* at iv.

A. HABITAT CONSERVATION PLANS, INCIDENTAL TAKE PERMITS, AND THE NO SURPRISES POLICY

After its enactment in 1973, the ESA came under increased scrutiny because of the burdens that it placed on private landowners and development.¹³² In 1982, § 10(a) of the ESA was amended to allow greater “[f]lexibility to accommodate private property interests while fulfilling its mandate to conserve and recover endangered and threatened species, and the ecosystems upon which they depend.”¹³³

Amended ESA § 10(a) gives the Secretary of Interior the authority to issue incidental take permits (ITPs), which allow “any taking otherwise prohibited by § 9(a)(1)(B)” as long as those takings are “incidental to . . . an otherwise lawful activity.”¹³⁴ To obtain an ITP, a landowner must develop a habitat conservation plan (HCP).¹³⁵ The landowner must address numerous issues in the HCP, including the impacts his activities will have on listed species and the steps he will take to minimize and mitigate these impacts.¹³⁶ The HCP can cover both species listed under the ESA and non-listed species, and has a procedure for addressing unforeseen circumstances.¹³⁷ The Secretary of the Interior may also include appropriate terms in the plan, which may include reporting requirements for the permit-holder.¹³⁸ If, after public comment, the Secretary makes the appropriate findings, he “shall issue the permit.”¹³⁹

To address landowners’ concerns about how they may be asked to respond to unforeseen circumstances, the USFWS also issued the “No Surprises Policy.”¹⁴⁰ This policy provides that a landowner who develops an HCP will not have further restrictions placed upon his land and will generally not be required to contribute more financially even if circumstances arise indicating that further mitigation is required for species listed under the permit.¹⁴¹ Only in extraordinary circumstances would the USFWS require more mitigation efforts by the permittee, and in those circumstances, those additional measures must maintain the original terms of the HCP to the greatest extent possible.¹⁴²

While they have had their detractors,¹⁴³ HCPs have been touted by the USFWS because they allow the agency to work with communities to integrate conservation ef-

132 See Karin P. Sheldon, *Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act*, 6 N.Y.U. ENVTL. J. 279, 280–81 (1998).

133 *Id.* at 283.

134 16 U.S.C. § 1539(a)(1)(B) (2012).

135 *Id.* § 1539(a)(2)(A).

136 *Id.* § 1539(a)(2)(A)(i)–(iv).

137 Sheldon, *supra* note 132, at 297.

138 16 U.S.C. § 1539(a)(2)(B)(v).

139 *Id.* The Secretary must publish notice of every permit in the Federal Register and allow for at least 30 days for public comment. *Id.* § 1539(c).

140 Sheldon, *supra* note 132, at 315.

141 U.S. FISH & WILDLIFE SERV, HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK, 3-30 (1996) [hereinafter HCP HANDBOOK], available at http://www.nmfs.noaa.gov/pr/pdfs/laws/hcp_handbook.pdf. No Surprises Assurances only apply to species that have been adequately covered under the HCP. *Id.*

142 *Id.*

143 Alejandro E. Camacho, *Can Regulation Evolve? Lessons from a Study in Maladaptive Management*, 55 UCLA L. REV. 293, 310–12 (2007); Sheldon, *supra* note 132, at 282. See also RASBAND ET. AL., *supra* note 119, at 423 (reporting that many environmental groups be-

forts without stymieing land-use activities.¹⁴⁴ For developers, the most integral parts of HCPs are the enforcement assurances. These assurances provide developers with tools and directions on how to assess, plan for, and avoid liability for take. Developers similarly benefit from a more collaborative and adaptive decision-making model that allows them to change their mitigation measures in response to evolving ecosystems while at the same time not depriving them of the assurances against prosecution.¹⁴⁵ HCPs therefore address the uncertainty of “take” liability under the ESA by ensuring that, even if a party is found to proximately cause take of an endangered species, he will not be held liable according to the terms of his ITP.

B. REGIONAL HCPs: THE GREAT PLAINS WIND ENERGY HCP

Because wind projects may take endangered and threatened species, some states and conservation groups have initiated innovative projects with an eye towards limiting potential impacts on wildlife. The Wind Energy Whooping Crane Action Group (WEWAG) is currently working on a plan (the Great Plains Wind Energy HCP) to develop a regional HCP that would span nine states and would specifically address the impacts that wind development would have on certain listed species.¹⁴⁶ The plan would designate a 200 mile wide corridor that follows the path of the whooping crane migration corridor and would offer ITPs to developers within that range who participate in the plan.¹⁴⁷ USFWS recently requested comments on the environmental impact statement (EIS) that it will prepare for the proposed HCP.¹⁴⁸ The USFWS specifically sought comments on how the ITP should be structured, whether USFWS should entrust a single ITP to a third-party that then enrolls wind developers or whether it should develop a single HCP and then issue individual ITPs to companies after providing evaluations under the National Environmental Policy Act (NEPA) and the ESA.¹⁴⁹

lieve that the FWS’s approach fails to incorporate adaptive management). *But see* Marj Nelson, *The Changing Face of HCPs*, 25 ENDANGERED SPECIES BULL. 4 (2000) (reporting that the No Surprises Policy actually solidifies the use of adaptive management in HCPs because applicants and the Service consider the possibility of changed circumstances when drafting a plan).

144 U.S. FISH & WILDLIFE SERV., HABITAT CONSERVATION PLANS, WORKING TOGETHER FOR ENDANGERED SPECIES 2 (2005), available at <http://www.fws.gov/endangered/esa-library/pdf/HCPsWorkingTogether5-2005web%20.pdf>.

145 Camacho, *supra* note 143, at 296. HCP HANDBOOK, *supra* note 141, at 3–24.

146 The plan would cover portions of North Dakota, South Dakota, Montana, Colorado, Nebraska, Kansas, New Mexico, Oklahoma, and Texas. 76 Fed. Reg. 41,510 (July 14, 2011). The species that may be covered under the proposed plan include the whooping crane (*Grus americana*), the endangered interior least tern (*Sterna antillarum athalassos*), the endangered piping plover (*Charadrius melodus*), and the lesser prairie-chicken (*Tympanuchus pallidicinctus*). *Id.* WEWAG is a group of nineteen wind energy companies convened by the AWEA to develop the Great Plains Wind Energy HCP. *What is WEWAG?*, GREAT PLAINS WIND ENERGY HABITAT CONSERVATION PLAN, http://greatplainswindhcp.org/aboutthehcp_whatishewag.cfm (last visited Jan. 28, 2013).

147 Draft Environmental Impact Statement and Habitat Conservation Plan for Commercial Wind Energy Developments Notice, 76 Fed. Reg. 41,512 (July 14, 2011).

148 *Id.*

149 There are actually four proposed structures currently being considered. *See id.*

Mitigation efforts like this regional HCP demonstrate the advantages that HCPs offer to wind energy developers. While details concerning the structure and implementation of such an HCP are still unclear, HCP regulations would at least extend clear assurances to wind developers once an ITP was issued. These assurances enable developers to predict with greater certainty the costs associated with specific projects and allow them to rely on these projections even when listed species' circumstances shift over the course of the plan.

C. MBTA REMEDIAL MEASURES: THE GUIDELINES

While a developer has a regulatory path to receiving concrete assurances that he will not be prosecuted for incidental take under the ESA, neither the MBTA's text nor its regulations offer developers similar assurances. The MBTA does authorize permits for specific purposes like import and export or scientific collection, but it does not expressly authorize, and the USFWS has not implemented, a permitting program similar to the ESA's ITPs.¹⁵⁰ The MBTA also allows the Secretary of the Interior to issue special purpose permits, which allow the take of "migratory birds, their parts, nests, or eggs," but only upon a "sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, or other compelling justification."¹⁵¹ Special purpose permits are not generally granted, and particularly not for general development and construction projects.¹⁵²

The USFWS has traditionally addressed the uncertainty surrounding "take" under the MBTA through lax enforcement. Recognizing that taking migratory birds is unavoidable in some circumstances, USFWS has assured developers that it will not prosecute those parties that take reasonable and effective measures to avoid take.¹⁵³ With recent growth of the wind industry, USFWS has taken a more proactive approach towards developing enforcement assurances for wind developers who undertake efforts to monitor and mitigate avian impacts.

In March 2012, the USFWS released the Final Land-Based Wind Energy Guidelines (Guidelines).¹⁵⁴ The Guidelines replaced interim guidelines that were put in place in 2003,¹⁵⁵ and were based largely on recommendations made by the Wind Turbine Guidelines Advisory Committee, which had been organized by the Secretary of the Interior to provide advice on how to minimize the impact of land-based wind energy facilities on

150 50 C.F.R. § 21.1 (2012).

151 *Id.* § 21.27.

152 INGAA FOUND., DEVELOPMENT OF A PERMIT PROGRAM FOR INCIDENTAL TAKE OF MIGRATORY BIRDS 4 (2010) available at <http://www.ingaa.org/Foundation/Foundation-Reports/Studies/8099/11060.aspx>.

153 Letter from Jeffrey K. Towner, Field Supervisor, N.D. Field Office, U.S. Fish & Wildlife Serv., to William F. McCarthy, Project Manager, E3 Environmental LLC 1-2 (Oct. 5, 2010), available at <http://www.psc.nd.gov/database/documents/10-0568/035-010.pdf>; Letter from Noreen E. Walsh, Reg'l Dir., U.S. Fish & Wildlife Serv., Mountain-Prairie Region, to William Healy, Jr., Vice-President, Ruby Pipeline LLC 2 (June 25, 2010), available at http://www.blm.gov/pgdata/etc/medialib/blm/nv/nepa/ruby_pipeline_project/rod/attachment_i.Par.63121.File.dat/Signed_USFWS_R6_response_ltr_June25_2010.pdf.

154 GUIDELINES, *supra* note 127, at i.

155 *Id.* at 11.

wildlife.¹⁵⁶ The Guidelines seek to “provide a structured, scientific process for addressing wildlife conservation concerns at all stages of land-based wind energy development.”¹⁵⁷ This “structure” is implemented through a tiered approach to assessing the impacts that wind energy projects might have on wildlife.¹⁵⁸ At five different stages of pre- and post-construction development, developers are directed to conduct various surveys and investigations to determine the impacts that development is having on wildlife and the risks that it will pose to wildlife in the future.¹⁵⁹ At all stages of development, the Guidelines “promote effective communication among wind energy developers and federal, state, and local conservation agencies and tribes.”¹⁶⁰

The USFWS issued three drafts of the Guidelines before settling on the current final Guidelines,¹⁶¹ and each version underwent substantial alterations.¹⁶² One of the most significant features of the Guidelines is the enforcement assurances offered to developers. Because the Guidelines are voluntary, USFWS needed to incorporate incentives into the Guidelines that would encourage developers to comply. The Guidelines therefore provide that:

[T]he Service will regard a developer’s or operator’s adherence to these Guidelines, including communication with the Service, as *appropriate means of identifying and implementing reasonable and effective measures* to avoid the take of species protected under the MBTA and BGEPA. The Chief of Law Enforcement or more senior official of the Service will make any decision whether to refer for prosecution any alleged take of such species, and will take such adherence and communication fully into account when *exercising discretion* with respect to such potential referral.¹⁶³

-
- 156 *Wind Turbine Guidelines Advisory Committee*, U.S. FISH & WILDLIFE SERVICE, http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee_information.html (last updated Mar. 26, 2012).
- 157 GUIDELINES, *supra* note 127, at vi.
- 158 *Id.*
- 159 *Id.* at 7.
- 160 *Id.* at vi.
- 161 *Wind Turbine Guidelines Advisory Committee*, U.S. FISH & WILDLIFE SERVICE, http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee_information.html (last updated Mar. 26, 2012).
- 162 AM. BIRD CONSERVANCY, RULEMAKING PETITION TO THE U.S. FISH & WILDLIFE SERVICE FOR REGULATING THE IMPACTS OF WIND ENERGY PROJECTS ON MIGRATORY BIRDS 55–57 (2011) [hereinafter ABC PETITION], available at http://www.abcbirds.org/abcprograms/policy/collisions/pdf/wind_rulemaking_petition.pdf. Conservationists have criticized the guidelines for adopting many of the suggestions of the wind energy sector while discounting the threats that wind projects pose to wildlife. *Id.*
- 163 GUIDELINES, *supra* note 127, at 6 (italics added). It is unclear how much these assurances differ from the FWS’s approach to prosecution before the Guidelines. At least in other industries, the FWS did not pursue prosecution when developers undertook reasonable and effective measures to avoid take of migratory birds. See e.g. Letter from Noreen Walsh, *supra* note 153 (stating that the Office of Law Enforcement focused its resources on those parties that take migratory birds without “implementing all reasonable, prudent, and effective measures to avoid that take”).

In contrast to HCPs, these assurances do not address the uncertainty surrounding “take” liability under the MBTA because they do not provide developers with a concrete method for avoiding liability. The Guidelines interpret “take” under the MBTA as a strict liability offense and indicate that take by wind turbines will be treated as a violation of the MBTA.¹⁶⁴ The Guidelines further state that “it is not possible to absolve individuals or companies from MBTA . . . liability,” but assure developers that the USFWS will focus its resources on “those who take migratory birds without identifying and implementing reasonable and effective measures to avoid the take.”¹⁶⁵ Thus, despite USFWS’s promises of prosecutorial discretion, every take of a migratory bird is a strict liability offense, and a developer could still theoretically be held liable for take under the MBTA even if it complies with the Guidelines.

Because the uncertainty of the MBTA springs from a disagreement about *mens rea*, the Guidelines could have addressed the uncertainty surrounding take liability if they had created a standard for assessing offenders’ guilt under the MBTA. For instance, the Guidelines’ current “appropriate means” language contrasts with language in earlier drafts, which provided that USFWS would take compliance with the Guidelines as evidence of “due care” and would exercise its discretion when choosing whether to recommend a developer for prosecution.¹⁶⁶ The American Wind Energy Association (AWEA) indicated in its comments to the draft guidelines that the “due care” language in the enforcement assurances provisions had been brokered to establish a negligence standard.¹⁶⁷ If this really were the case, then it would have resolved some of the uncertainty surrounding the MBTA by providing developers with a clearer path towards avoiding liability. It would have made compliance with the Guidelines a defense to strict liability and permitted developers to move forward with projects even though they would foreseeably take migratory birds in the process.

The Guidelines possess other weaknesses that exacerbate the problems created by their vague enforcement assurances. For instance, during the comment period on the draft Guidelines, some in the energy community worried that the Guidelines gave USFWS too much input and control in each tier of the process.¹⁶⁸ The final Guidelines more clearly leave decisions about how much a developer will communicate with USFWS up to the developer,¹⁶⁹ but these changes still leave open the question of how much a developer must communicate with USFWS to be deemed in compliance with the Guidelines.¹⁷⁰ Additionally, a developer may strive to coordinate sufficiently with

164 GUIDELINES, *supra* note 127, at 6.

165 *Id.*

166 U.S. FISH & WILDLIFE SERV., DRAFT LAND-BASED WIND ENERGY GUIDELINES 12 (2011) available at http://www.fws.gov/windenergy/docs/WEG_July_12_%202011.pdf.

167 Letter from Am. Wind Energy Ass’n. to Wind Energy Guidelines Div. of Fisheries and Habitat Conservation, U.S. Fish & Wildlife Serv. 42 (May 19, 2011), available at http://www.fws.gov/windenergy/wind_comments/AWEA.pdf.

168 *Id.* at 24.

169 GUIDELINES, *supra* note 127, at 7.

170 *Id.* at 4. See James M. Lynch, Raymond P. Pepe, Marie E. Quasius, *K&L Gates: Update on Status of Land-based Wind Energy Guidelines* (Apr. 12, 2012), <http://m.klgates.com/update-on-the-status-of-land-based-wind-energy-guidelines-04-12-2012/>.

USFWS, but because USFWS faces budget and manpower constraints, he may not receive sufficient feedback to know if he has done enough to avoid prosecution.¹⁷¹

Unlike the ESA, where a party who would otherwise be liable for take may avoid liability through compliance with the terms of an incidental take permit, the Guidelines only offer assurances that the USFWS will not make prosecution a priority. Because these promises do not fully protect developers from liability, they hinder a developers' ability to organize a wind project. Uncertain promises that do not fully diminish potential liability may deter investment and financing, leading to higher costs and lower returns for developers.¹⁷² To avoid criminal liability for take under the MBTA, developers may over-invest in mitigation and monitoring. On the other hand, less risk-averse developers may conclude that the costs of complying with the Guidelines outweigh the benefit of receiving hazy assurances of discretion from the USFWS and may ignore them altogether. This would then validate conservationists' concerns that the voluntary nature of the Guidelines will undermine their potential to protect wildlife from negative impacts by wind energy development.¹⁷³

IV. FUTURE LITIGATION AND SUGGESTIONS

Because courts may go either way on how they apply the MBTA to wind energy development, parties in future litigation will argue many of the same points that have been introduced in past MBTA cases. Arguments over due process will inevitably arise because developing wind turbines is not a dangerous activity, and courts may go either way on how broadly they decide to interpret the MBTA's prohibitions on take. All of this legal wrangling may be avoided, however, by legislative or executive action. Any one of the following three suggestions for legislative and executive actions could alleviate the constitutional due process issues that have arisen in the past years and better balance the conservation and development interests implicated by the MBTA provisions.

First, the MBTA could be amended to impose civil penalties for take of migratory birds. Like the ESA, these could be strict liability penalties. By getting rid of strict criminal liability, this amendment would avoid the difficulties that arise when courts try to construe take under the MBTA as public welfare offenses. Though the USFWS loses some leverage if it cannot impose criminal misdemeanor penalties, the agency generally only prosecutes the most egregious violators, and a \$15,000 penalty for each violation is still a significant deterrent.

Second, if the MBTA is not amended to impose strict civil penalties, it could be amended to make only "knowing" take a misdemeanor. Introducing a *mens rea* requirement into the MBTA's misdemeanor take provisions would avoid the constitutional problems that arise when imposing strict liability for relatively benign activities that take birds and would also give courts less incentive to read the MBTA narrowly to include

171 See Lilley & Firestone, *supra* note 126, at 1213.

172 Letter from Am. Wind Energy Ass'n., *supra* note 167, at 19 ("Issues or policies that increase uncertainty and risk will raise questions about the viability of the investment, making it less attractive and/or more expensive to pursue.").

173 ABC PETITION, *supra* note 162, at 57.

only intentional acts like hunting and baiting. If the MBTA prohibits knowing violations, then it could still reach those takings by wind turbines when the developers know that the siting and placement of the project will result in the take of migratory birds.

Because amending a statute is both difficult and unlikely, the most effective change that could be made to better reconcile development and conservation interests is to amend the Guidelines to incorporate the due care standard that existed in earlier drafts. Perhaps because scientific data cataloguing migratory pathways and wildlife impacts by wind turbines is still undeveloped, USFWS was loath to make concrete assurances in the current Guidelines that would free developers from liability. Similarly, it may not have wanted to restrict the long reach of the MBTA by precluding its ability to prosecute take of migratory birds. But, by creating a negligence standard, “due care” would mirror the enforcement assurances that landowners and developers receive under the ESA. Developers would be induced to follow the Guidelines because they would know that as long as they were in compliance, they could be exempt from prosecution, even if courts could not decide on how the MBTA applies to wind developments.

Many have suggested that the USFWS should implement an incidental take permitting system for the MBTA similar to the system already established under the ESA. While the USFWS may already have authority to issue such permits, and while it already issues ITPs in very limited circumstances, implementing a permitting system is impractical for two reasons. First, if it is unclear whether a court will find that a developer’s activities are covered under the MBTA, then the developer may have limited incentive to commit to the conditions that accompany an ITP. Second, a permitting system would be extremely costly for the USFWS to implement given the numerous activities that take birds. With the immense cost and difficulties that would accompany a permitting system, it is no surprise the USFWS has elected instead to create a case-specific remedy for wind projects through which it may place the burden for conservation on developers and reserve the right to enforce the MBTA through prosecution.

V. CONCLUSION

When the MBTA was first enacted, courts had no problem deeming take of migratory birds as a public welfare offense, but after nearly a century of legal wrangling, courts are questioning whether the MBTA can justifiably hold individuals strictly liable for all forms of take. This judicial uncertainty about the reach of the MBTA will inevitably impact wind energy projects, where migratory birds will foreseeably be taken by wind turbines. To reconcile the nation’s policy of promoting renewable energy development with the necessity of preserving wildlife, the MBTA could be amended to prohibit only knowing takings or to impose civil, instead of criminal, liability. In the alternative, the USFWS’s Final Guidelines could also be revised to include a due care standard. Any of these changes would avoid the constitutional due process concerns that arise when courts impose strict criminal liability for take of migratory birds by requiring some degree of fault on the part of developers.

Tyson Lies is a recent graduate of The University of Texas in Austin where he has served as the Research Editor for the Texas Law Review. He is currently clerking for the Honorable Jane J. Boyle in the United States District Court for the Northern District of Texas and then plans to

practice in Texas. The author would like to thank Jeff Civins for his guidance and help in refining this article and Melinda Taylor for her comments. He would also like to thank his wife, who has listened to more talk of migratory birds in the past year than anyone should have to endure in a lifetime.

RECENT DEVELOPMENTS

Air Quality	223
Natural Resources	227
Solid Waste	232
Water Quality and Utilities	235
Water Rights	238
Casenotes: Federal	240
Casenotes: State	243
Publications	245
Washington Update	250

AIR QUALITY

COAL. FOR RESPONSIBLE REGULATION, INC. v. ENVTL. PROT. AGENCY, 684 F.3D 102 (D.C. CIR. 2012)

On June 26, 2012, in response to challenges from various states and industry groups, the D.C. Circuit Court of Appeals addressed whether final actions of the Environmental Protection Agency (EPA) concerning its greenhouse gas-related rules related to motor-vehicle emissions were based on improper construction of the Clean Air Act (CAA) and whether the actions were arbitrary and capricious. *Coal. for Responsible Regulation, Inc. v. Env'tl. Prot. Agency*, 684 F.3d 102 (D.C. Cir. 2012). This comment will address the background leading up to EPA's Final Agency Action and the court's decision in that case.

A. THE CHALLENGED EPA FINAL DECISION

The Supreme Court's 2007 decision in *Massachusetts v. Environmental Protection Agency* directed EPA to determine for greenhouse gases "whether sufficient information exists to make an endangerment finding." 549 U.S. 497, 534 (2007). Such a finding represents an EPA determination that greenhouse gases are air pollutants that contribute to climate change. Unless EPA could determine that "greenhouse gases do not contribute to climate change or [] provide[] some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do," the decision further directed EPA to issue an endangerment finding. *Id.* at 533. In response to that decision, EPA issued rules regulating greenhouse gases as an "air pollutant" under the CAA because the definition of "air pollutant" "embraces all airborne compounds of whatever stripe." *Id.* at 529 (emphasis added) (citing 42 U.S.C. § 7602(g)). EPA's rules included:

- (1) an Endangerment Finding, determining that greenhouse gases may "reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1) (Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (hereinafter *Endangerment Finding*);

(2) the Tailpipe Rule, setting greenhouse gas emission standards for cars and light trucks. *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule*, 75 Fed. Reg. 25,324 (May 7, 2010) (hereinafter *Tailpipe Rule*);

(3) the Timing Rule, delaying the regulation of an air pollutant until it becomes “subject to regulation” under the CAA. *Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs*, 75 Fed. Reg. 17,004 (Apr. 2, 2010) (hereinafter *Timing Rule*); and

(4) the Tailoring Rule, providing for initial regulation of only the largest sources because the immediate addition of the sources to the Prevention of Significant Deterioration of Air Quality (PSD) and Title V programs would likely result in extensive costs to industry and state permitting authorities. *Tailoring Rule*, 75 Fed. Reg. at 31,534–36 (June 3, 2010).

B. D.C. CIRCUIT’S AFFIRMATION OF EPA’S FINAL DECISION

State and Industry Petitioners sought review of EPA’s Final Agency Action on a series of greenhouse gas-related rules, arguing they constituted an arbitrary and capricious construction of the CAA. Affirming EPA’s Final Decision, the court held that: 1) EPA’s Endangerment Finding and the Tailpipe Rule were neither arbitrary nor capricious; 2) EPA’s interpretation of the governing CAA provisions is unambiguously correct; and 3) Petitioners lacked standing to challenge the Timing and Tailoring rules (collectively, Petitioners).

1. EPA’S ENDANGERMENT FINDING AND TAILPIPE RULE WERE NEITHER ARBITRARY NOR CAPRICIOUS

The court held that EPA’s “Endangerment Finding is consistent with *Massachusetts v. EPA* and the text and structure of [the CAA], and is adequately supported by the administrative record.” *Coal. for Responsible Regulation*, 684 F.3d at 117.

Relying on *Massachusetts v. Envtl. Prot. Agency* and the specific language in CAA § 202(a)(1), the court rejected Petitioners’ challenge to EPA’s decision, concluding that it did not improperly consider policy or regulatory concerns but rather made a science-based judgment. The court emphasized that § 202(a)(1) only requires EPA to answer “whether particular ‘air pollution’—here, greenhouse gases—‘may reasonably be anticipated to endanger public health or welfare,’ and whether motor-vehicle emissions ‘cause, or contribute to’ that endangerment.” *Id.* (citing *Massachusetts v. Envtl. Prot. Agency*, 549 U.S. at 532–33; 42 U.S.C. § 7521(a)(1)). The court emphasized “that EPA must ground its reasons for action or inaction in the statute,” which refers to endangerment, not policy. *Id.* at 118 (quoting *Massachusetts v. Envtl. Prot. Agency*, 549 U.S. at 535).

Next, the court rejected Petitioners’ challenge to the adequacy of the scientific record supporting the Endangerment Finding. It noted that EPA “is not required to reprove the existence of the atom every time it approaches a scientific question.” *Id.* The court also declined to evaluate the adequacy of the scientific evidence relied upon by EPA. *Id.* EPA is not only entitled to “make an endangerment finding despite lingering scientific uncertainty” under the holding in *Massachusetts v. EPA*, it must do so unless it has profound scientific uncertainty to preclude it “from making a reasoned judgment as to whether greenhouse gases contribute to global warming.” *Id.* at 122 (citing *Massachusetts v. Envtl. Prot. Agency*, 549 U.S. at 534).

The court also rejected Petitioners' contention that the Endangerment Finding was arbitrary and capricious because it did not "define," "measure," or "quantify" values associated with endangerment. The court concluded that CAA § 202(a)(1) requires a flexible, case-by-case evaluation of endangerment because danger "is composed of reciprocal elements of risk and harm, or probability and severity." *Id.* at 123 (quoting *Ethyl Corp. v. Envtl. Prot. Agency*, 541 F.2d 1, 18 (D.C. Cir. 1976)). EPA's failure to assign "a specific number at which greenhouse gases cause 'dangerous' climate change is a function of the precautionary thrust of the CAA and the multivariate and sometimes uncertain nature of climate science, not a sign of arbitrary or capricious decision-making." *Id.*

The court also upheld EPA's decision not to consider cost impacts in its conclusion that the Tailpipe Rule triggers stationary-source regulation under the PSD and Title V provisions. CAA § 202(a)(1) requires that the "Administrator *shall* by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1) (emphasis added). The court held that Congress' clear use of the word "shall" created a non-discretionary duty for EPA, which refutes the petitioners' contention that EPA had discretion to defer issuing motor-vehicle emission standards because of stationary-source costs. *Coal. for Responsible Regulation*, 684 F.3d at 126 (citing *Sierra Club v. Jackson*, 648 F.3d 848, 856 (D.C. Cir. 2011)).

Petitioners' allegation under the Administrative Procedure Act—that EPA failed to justify its decisions based on identified risks in the Endangerment Finding and to show how the proposed standard would mitigate the alleged endangerment in a meaningful way—also failed. *Id.* at 127. The court reasoned that EPA's regulations do not have to be premised on factual proof of actual harm, but rather may be based on a "significant risk of harm." *Id.* at 127–28 (citing *Ethyl*, 541 F.2d at 7–13). The court further concluded that EPA need not regulate based on a specific level of mitigation, but only as needed to address a significant contribution of the subject pollutants. *Id.* EPA met this requirement in its "determination in the Endangerment Finding, concluding that vehicle emissions are a significant contributor to domestic greenhouse gas emissions" and in the preamble of the Tailpipe Rule where it "found that the emission standards would result in meaningful mitigation of greenhouse gas emissions." *Id.* at 128 (citing *Endangerment Finding*, 74 Fed. Reg. at 66,499).

2. EPA'S INTERPRETATION OF THE GOVERNING CAA PROVISIONS IS UNAMBIGUOUSLY CORRECT

In evaluating Petitioners' claims, the court examined whether EPA's interpretation of the PSD program to include major greenhouse gas emitters is compelled by the statute. *Id.* at 133–34. This issue centers on which stationary sources should count as "major emitting facilities" subject to regulation. Since 1978, EPA has interpreted "any air pollutant" as referenced in the definition of "major emitting facility" as "any air pollutant regulated under the CAA." *Id.* at 133 (citing *1978 Implementation Plan Requirements*, 43 Fed. Reg. at 26,388, 26,403). In its decision, the court reviewed EPA's Endangerment Finding under the *Chevron* two-step test. *Id.* at 116 (citing *Chevron, U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842–43 (1984)). The court

concluded “that ‘any air pollutant’ in the definition of ‘major emitting facility’ unambiguously means ‘any air pollutant regulated under the CAA.’” *Id.* at 136.

In support of this conclusion, the court first looked to the statute’s plain language to determine whether Congress directly addressed the precise question at issue. *Id.* at 134. Under CAA § 169(1), PSD permits are required for stationary sources emitting major amounts of “any air pollutant.” *Id.* (quoting 42 U.S.C. § 7479(1) (emphasis added)). It also noted that “[g]reenhouse gases are indisputably an ‘air pollutant.’” *Id.* (citing *Massachusetts v. Env’tl. Prot. Agency*, 549 U.S. at 528–29). The court then determined that “Congress’s use of the broad, indiscriminate modifier ‘any’[] strongly suggests that the phrase ‘any air pollutant’ encompasses greenhouse gases.” *Id.* at 134.

The court further relied on the Supreme Court’s holding in *Massachusetts v. Environmental Protection Agency* “that the CAA’s overarching definition of ‘air pollutant’ in § 302(g)—which applies to all provisions of the Act, including the PSD program—unambiguously includes greenhouse gases.” *Id.* The court noted the Supreme Court’s conclusion that “the Clean Air Act’s sweeping definition of ‘air pollutant’ includes ‘any air pollution agent or combination of such agents . . . which is emitted into or otherwise enters the ambient air . . . embraces all airborne compounds of whatever stripe, and underscores that intent through repeated use of the word ‘any.’” *Id.* (quoting *Massachusetts v. Env’tl. Prot. Agency*, 549 U.S. at 529 (quoting 42 U.S.C. § 7602(g) (quotation marks omitted))). Of most importance here, the Supreme Court held that “the statute is unambiguous.” *Id.* (quoting *Massachusetts v. Env’tl. Prot. Agency*, 549 U.S. at 529 (quotation marks omitted))). The court decided that, while EPA’s definition of “any air pollutant,” which refers to “regulated” pollutants, is slightly more narrow than the literal statutory definition, the language was not ambiguous since “any regulated air pollutant” is “the only logical reading” of that definition. *Id.* at 134.

The court found further support for its position through the PSD program’s requirement for installation of control technology by covered sources for “each pollutant” regulated under the CAA. *Id.* at 136 (citing 42 U.S.C. § 7475(a)(4)). Furthermore, Congress’ “Declaration of Purpose” specifically states that the PSD program was intended to “protect against adverse effects on ‘weather’ and ‘climate’ – precisely the types of harm caused by greenhouse gases.” *Id.* (citing 42 U.S.C. § 7470(1)). Because of these provisions, the court held that the “PSD program was intended to control pollutants regulated under every section of the Act.” *Id.* Between the statutory definition, the PSD program requirements and Congress’ declared purpose, the court concluded “that ‘any air pollutant’ in the definition of ‘major emitting facility’ unambiguously means ‘any air pollutant regulated under the CAA.’” *Id.* at 136.

3. PETITIONERS LACK STANDING TO CHALLENGE THE TIMING AND TAILORING RULES

The court found it lacked jurisdiction to evaluate Petitioners’ challenges of the Timing and Tailoring rules, because Petitioners lacked standing to bring these claims. Standing requires an “injury in fact” that is, among other things, “likely, as opposed to merely speculative [to] be redressed by a favorable decision.” *Id.* at 146 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992)). The court concluded that Petitioners lacked such injury. Here, Industry Petitioners claimed injury because they were subject to greenhouse gas regulation. State Petitioners claimed injury from a heavier administrative burden because they owned some of the regulated sources. The court

found that Petitioners were not injured by the regulations because the Tailoring and Timing rules sufficiently mitigated those purported injuries with respect to when the regulations would begin to apply and the management of new permit applications. *Id.* at 146.

C. DEVELOPMENTS SINCE D.C. CIRCUIT DECISION

Since the D.C. Circuit decision, the U.S. Chamber of Commerce, the National Association of Manufacturers and others have filed petitions to rehear the case. Petitioners sought an en banc rehearing asserting that the panel's decision conflicted with the Supreme Court's decisions in several cases and that the issue "involves numerous questions of exceptional importance affecting the entire national economy." Chamber of Commerce Petition for Rehearing, *Coal. for Responsible Regulation, Inc. v. Env'tl. Prot. Agency*, 684 F.3d 102 (D.C. Cir. 2012) (No. 1388742); *see also* National Association of Manufacturers Petition for Rehearing, *Coal. for Responsible Regulation, Inc. v. Env'tl. Prot. Agency*, 684 F.3d 102 (D.C. Cir. 2012) (No. 1388641). The Department of Justice and EPA filed a response on October 12, 2012.

John B. Turney is an environmental attorney at Richards, Rodriguez & Skeith, L.L.P.

Angela Lipscomb is a student at the University of Texas School of Law and a staff member of the Texas Environmental Law Journal.

NATURAL RESOURCES

SEVERANCE V. PATTERSON AND THE END OF OPEN BEACHES IN TEXAS

The six-year legal battle between the State of Texas and a California divorce attorney over private property rights in Galveston's West End Beach reached a finale last March in a 5-3 decision that sent a tidal wave through decades of jurisprudence regarding the Texas Open Beaches Act (OBA). *See Severance v. Patterson*, 370 S.W.3d 705 (Tex. 2012); *see also Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES (Texas Gen. Land Office, Austin, Tex.) Aug. 2012, at 1-2, *available at* <http://www.glo.texas.gov/GLO/publications/field-notes-august-2012.pdf>.

On March 30, 2012, after reconsideration on a motion for rehearing, the Texas Supreme Court affirmed its prior ruling in favor of beach-front property owners' rights to exclude the general public from privately-owned parcels now seaward of the vegetation line as a result of both gradual erosion and avulsive events, such as Hurricane Rita in 2006. *Severance*, 370 S.W.3d at 732. The decision represents a huge victory for Carol Severance and other private property owners and illustrates the court's commitment to preserving the landowner's right to exclude—generally recognized as one of the most fundamental "sticks" in the proverbial "bundle" of property rights. *Id.* at 709. At the same time, the decision brings to a close Texas' long-standing public policy of guaranteeing the public the free right of access to Texas beaches along the Gulf Coast, a tradition held dearly by Texas fisherman, surfers, vacationers and other Texans who grew up exploring on the public beach. The *Severance* decision has potentially far-reaching impli-

cations not only for those on Galveston's West End Beach, but also for the entire Texas coast. Further, it gives great power to anyone who challenges a public right of easement on beachfront property, effectively putting the public's use and enjoyment of Texas beaches in jeopardy. *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 2.

BACKGROUND AND PROCEDURAL HISTORY

Severance v. Patterson involved three parcels on Galveston Island's West Beach purchased in 2005 by Carol Severance, a California divorce attorney and real estate broker, who rented the properties to Texas families. *Severance*, 370 S.W.3d at 711; *see also Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 1. Although a public easement for use of the privately-owned parcel seaward of Severance's property preexisted the purchase, Severance's parcels were never subjected to any kind of easement. *Severance*, 370 S.W.3d at 711. Controversy arose in the aftermath of Hurricane Rita, which destroyed the adjacent property burdened by easement and moved the vegetation line landward. *Id.* at 712. As a result, Severance's properties became situated on the dry beach seaward of the vegetation line, raising the issue of whether the pre-existing easement "rolled" onto Severance's property along with the migrating line of vegetation. *Id.*

Pursuant to the OBA, the State sought to enforce a "rolling easement" on Severance's property on the ground that it interfered with the public's use of the dry beach. *Id.* Severance responded with a lawsuit, challenging the attempted enforcement on Fourth, Fifth, and Fourteenth Amendment grounds. *Id.* The Federal District Court for the Southern District of Texas granted the State's motion to dismiss, "determining [that Severance's] arguments regarding the constitutionality of a rolling easement . . . were deficient on the merits." *Id.* On appeal, the United States Court of Appeals for the Fifth Circuit determined that Severance's takings claim was not ripe for review, "but certified unsettled questions of state law" to the Texas Supreme Court "to guide its determination on her Fourth Amendment unreasonable seizure claim." *Id.* The Texas Supreme Court rendered a decision in favor of Severance on November 5, 2010, but granted the State's request for rehearing on March 11, 2011. *Id.* Upon receiving the Texas Supreme Court's answers to certified questions on appeal, the Fifth Circuit reversed the district court's grant of the State's motion to dismiss predicated on Fed. R. Civ. P. 12(b)(1) and (6) and remanded for further proceedings regarding Severance's Fourth Amendment claim. *Severance v. Patterson*, 682 F.3d 360, 361 (5th Cir. 2012).

LEGAL BACKGROUND

It is long established under Texas law that all lands submerged by the Gulf of Mexico belong to the State to be "held in trust for the use and benefit of all the people." *Severance*, 379 S.W.3d at 715 (quoting *Lorino v. Crawford Packing Co.*, 175 S.W.2d 819, 820 (Tex. 1929)); *see also* TEX. NAT. RES. CODE § 11.012(c) (West 2011). Accordingly, all coastal property between mean low tide and mean high tide along the Coast constitutes the "wet beach" owned by the state, "regardless of whether the property immediately landward is privately or state owned." *Severance*, 379 S.W.3d at 714 (quoting Richard J. Elliott, *The Texas Open Beaches Act: Public Rights to Beach Access*, 28 BAYLOR L. REV. 383, 384 (1976)). In contrast, coastal property extending landward from the mean high

tide to the line of vegetation comprises the “dry beach,” which may be subject to private ownership. *Id.*

In 1959, the Texas Legislature enacted the OBA to establish “the State’s policy for the public to have ‘free and unrestricted access’ to State-owned beaches, the wet beach, and the dry beach if the public had acquired an easement or other right to use that property.” *Id.* at 718-19 (quoting TEX. NAT. RES. CODE § 61.011(a) (West 2011)). Pursuant to this goal, “the OBA prohibit[ed] anyone from creating, erecting, or constructing any ‘obstruction, barrier, or restraint that [would] interfere with the free and unrestricted right of the public’ to access” those areas of the beach on which public easement existed. *Id.* at 719 (quoting TEX. NAT. RES. CODE § 61.013(a) (West 2011)).

MAJORITY OPINION

On motion for rehearing, the court considered “the competing interests between the State’s asserted right to a rolling public easement to use privately owned beachfront property . . . and the rights of the private property owner to exclude others from her property,” finding that although “the public has an important interest in the enjoyment of the public beaches[,] . . . the right to exclude . . . is among the most valuable and fundamental of rights possessed by private property owners.” *Id.* at 713. The central question for the court was “whether private beachfront properties on Galveston Island’s West Beach are impressed with a right of public use under Texas law without proof of easement.” *Id.* at 708. The court found that, under the OBA, the legislature recognized that the existence of a public right to an easement in the privately-owned dry beach area of West Beach is dependent on the government’s establishing an easement in the dry beach or the public’s right to use the beach ‘by virtue of continuous right in the public since time immemorial.’” *Id.* at 714–15; *see also* TEX. NAT. RES. CODE § 61.001(8) (West 2011).

The court first inquired as to whether Texas common law recognizes such an inherent limitation on private property rights along Galveston’s West Beach. *Severance*, 379 S.W.3d at 715. The court found that, when private title was granted to individual owners in 1840, the government “release[d] and relinquishe[d] forever . . . all title to” the land to the private owners. *Id.* at 716. While the State “could have reserved the right of the public to use the beachfront property,” the court reasoned, “the plain language of the grant shows that [it] did not do so.” *Id.* at 717. Accordingly, the court reasoned, “there are no inherent limitations on title or continuous rights in the public since time immemorial that serve as a basis for engrafting public easements for the use of private West Beach property.” *Id.* at 733.

Finding no inherent limitations on *Severance*’s property rights, the court next considered the question of “whether principles of Texas property law provide for a rolling easement on the beaches along the Gulf Coast.” *Id.* at 714. The court noted that property along the Gulf Coast is “subjected to hurricanes and tropical storms, on top of the everyday natural forces of wind, rain and tidal ebbs and flows that affect the coastal properties and shift the vegetation line.” *Id.* at 723. In contrast to easements attached to static property boundaries, easements encumbering beachfront properties will necessarily change according to regular changes in the shoreline. *Id.* at 722. There is a key distinction affecting the magnitude of the flexibility of beachfront easements, however, between movement due to erosion and accretion, which are “gradual and imperceptible changes,” and avulsion, which results from “a rapid and perceptible change” in the

shoreline. *Id.* Whereas a littoral landowner either acquires or loses land as a result of an easement moving with gradual and imperceptible changes in the shoreline due to erosion and accretion on the beach, sudden and perceptible changes do not allow for such changes in easement boundaries. *Id.* When a sudden event such as a hurricane or tropical storm moves the mean high tide line and vegetation line suddenly and perceptibly, causing a former dry beach to become part of the state-owned wet beach or completely submerged, the adjacent private property owner is not automatically deprived of her right to exclude the public from the new dry beach. *Id.* at 723-24. Rather, the court reasoned, “the State may seek to establish another easement as permitted by law on the newly created dry beach and assert public right to use the private land.” *Id.* at 724. Thus, the court held that “a public beachfront easement in West Beach, although dynamic, does not roll under Texas law.” *Id.* at 724. Accordingly, “if the public is to have an easement on a newly created and privately owned dry beach after an avulsive event, the State must prove it, as with other property.” *Id.* at 724.

DISSENTING OPINIONS

The majority opinion elicited three separate dissents. Justice Medina wrote first, characterizing the court’s holding as jeopardizing the public’s right to free and open beaches and disturbing the OBA’s reasoned balance between private property rights and the public’s free and unrestricted use of the beach. *Id.* at 733–34 (Medina, J., dissenting). While conceding that there was no *express* easement made in the original land grants to the property in question, Justice Medina argued that the court’s decision “ignores the implied easement arising from the public’s continued use of the beach for nearly 200 years.” *Id.* at 738. Further, Justice Medina criticized the court’s “illogical [distinction] between shoreline movements by accretion and avulsion,” noting that Texas courts have repeatedly held that once an easement is established, it expands or contracts . . . despite the sudden shift of the vegetation line.” *Id.* at 737-38. As a result, Justice Medina contended, “every hurricane season will bring new burdens not only on the public’s ability to access Texas’s beaches but on the public treasury as well.” *Id.* at 739.

Justice Guzman wrote second, asserting that private property owners like Severance must forfeit some but not all of their property rights without just compensation. *Id.* at 744 (Guzman, J., dissenting). While Guzman agreed with Justice Medina’s contentions on Texas common law and the illogical distinction between accretion and avulsion, he wrote separately to assert that a coastal landowner whose property is burdened with an easement should not be required to remove his property or lose the right to use and maintain it. *Id.* at 744. Rather, a rolling easement which unreasonably burdens the servient estate so as to deprive the property owner of use and maintenance of her home would entitle the owner to compensation for a taking. *Id.* The majority dismissed this view as a severe limitation on the critical right to exclude, contemplating a scenario in which “a homeowner . . . could look out her window . . . as strangers play beach volleyball in her yard.” *Id.* at 730.

Justice Lehrmann wrote last, joining Justice Medina’s dissenting opinion but writing separately to emphasize additional points, most significantly the troubling practical implications of the Court’s decision. *Id.* at 754 (Lehrmann, J., dissenting). According to Justice Lehrmann, the decision “will contribute to the degradation of Texas’s beaches, ultimately to the detriment” of both littoral and non-littoral property owners. *Id.* at

754–55. The decision severely hampers the State’s ability to enforce the OBA’s restrictions on the placement of structures on the dry beach, which can “discourage the growth of vegetation that would . . . help protect landward areas from storm impacts and slow the rate of shoreline retreat.” *Id.* at 754. Further, because the Texas Constitution restricts and prohibits public expenditures for private purposes, the State and local governments will be prevented “from funding vital beach renourishment programs . . . [on] beaches from which the public is excluded.” *Id.* at 754–55. Justice Lehrmann also noted that the public’s diminishing right to public beach access will have detrimental effects on non-littoral property owners stemming from decreasing levels of tourism and declining values of homes whose owners “believed . . . included an interest in the dry beach as common property.” *Id.* at 755.

PRACTICAL IMPLICATIONS OF THE *SEVERANCE* DECISION

With one of the highest erosion rates in the United States, Texas loses five to ten feet of beach each year, causing previously unencumbered parcels to fall on the seaward side of the line of vegetation. *Open Beaches*, TEX. GEN. LAND. OFFICE, <http://www.glo.texas.gov/what-we-do/caring-for-the-coast/open-beaches/index.html> (last visited Jan. 20, 2013). As such, the implications of the *Severance* decision will be widely felt as miles of public beaches are gradually moving into unencumbered private parcels. While the decision is a huge victory for landowners wanting to exclude others from their property, the possible implications of the decision pose a great threat to Galveston and other coastal communities.

Opponents of the decision argue that “much-needed beach renourishment projects for Galveston Island’s rapidly eroding West End” will cease to exist because public money cannot be used to benefit only a private landowner. *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 1-2. Further, the ruling makes it impossible for the state to act quickly to clear the beach of debris after a hurricane demolishes beachfront houses, efforts that amounted to expenditures of \$43 million by the General Land Office (GLO) on beach clean-up efforts after hurricanes Ike and Dolly. *Id.* Reports also indicate that the decision has led the GLO to cancel a \$40 million beach restoration project on western Galveston Island on the ground that the beaches eroded by Hurricane Ike in 2008 are now private. Christopher Smith Gonzalez, *Court: Public Beach Easement Does Not Roll*, THE GALVESTON COUNTY DAILY NEWS (Mar. 31, 2012), http://www.galvestondailynews.com/news/article_1199f272-aafc-50f7-bde5-ac3f993defe6.html. The decision also raises great concerns among other coastal communities, as it “gives a pretty big club to anyone who wants to challenge the Texas Open Beaches Act anywhere else along the coast.” *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 2.

The *Severance* decision is not without supporters, however, as many view the decision as “a great victory for all Texas property owners” putting an end to “the rolling easement as we know it.” Christopher Smith Gonzalez, *Court: Public Beach Easement Does Not Roll*. Property owners like Carol Severance and others along the Texas coast are free to exclude unwanted strangers from their property and to build on their portions of the dry beach. *Fighting Government Seizure and Removal of Homes*, PACIFIC LEGAL FOUNDATION, <http://www.pacificlegal.org/cases/Fighting-government-seizure-and-removal-of-homes> (last visited Jan. 20, 2013).

Aileen Hooks is a partner at Baker Botts, L.L.P. The focus of her practice is environmental, health, and safety compliance and permitting, commercial real estate transactions, strategic relationships, and outsourcing.

Austin Whitmore is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

SOLID WASTE

THE NINTH COURT OF APPEALS RULES ON REMAND IN *FPL FARMING v. ENVIRONMENTAL PROCESSING SYSTEMS*

On September 13, 2012, the Ninth Court of Appeals (Beaumont) in *FPL Farming Ltd. v. Environmental Processing Systems* provided clarification with regards to trespass law in Texas involving the injection and subsurface migration of wastewater. 383 S.W.3d 274 (Tex. App.—Beaumont 2012, pet. filed). Addressing specific issues following remand from the Supreme Court of Texas, the Beaumont court found that: (1) the burden of proving consent in trespass is placed on the alleged trespasser; (2) trespass is a viable cause of action for invasions of the briny water at the subsurface level even without damage at the surface level; and (3) it is possible the jury could find trespass damages caused by an injection well. *Id.*

BACKGROUND

The controversy between FPL Farming Ltd. (FPL) and Environmental Processing Systems, L.C. (EPS) has been ongoing since 1996. *FPL Farming Ltd. v. Envntl. Processing Sys., L.C.*, 351 S.W.3d 306, 308 (Tex. 2011). In 1996, EPS applied for and received a permit for an injection well on land adjacent to FPL's land. *Id.* at 309.

In 2006, FPL filed suit for trespass seeking an injunction and damages. *Id.* After the jury found no trespass had occurred, FPL appealed to the Beaumont Court of Appeals. *Id.* The Beaumont Court of Appeals decided only whether FPL was able to "pursue a trespass claim when [] TCEQ approved an amended permit allowing EPS to inject the wastewater" and TCEQ was aware from the data provided that "EPS's waste plume was projected to migrate into the deep subsurface of the formation underlying FPL's property." *Id.* The Court of Appeals affirmed the trial court's decision, deciding that a permit issued by a state agency shields the permittee from civil tort liability. *Id.* FPL then petitioned the Supreme Court of Texas and the petition for review was granted. *Id.*

On August 26, 2011, the Texas Supreme Court decided *FPL Farming Ltd. v. Environmental Processing Systems, L.C.*, 351 S.W.3d 306, 307 (Tex. 2011), reversing the Court of Appeals' finding that the TCEQ permit provided a shield from civil tort liability and remanding the case back to the Beaumont Court of Appeals to rule on the underground trespass issue. *Id.* at 308. In reaching its conclusion, the court noted that the Injection Well Act governing subsurface injection wells specifically provides that issuance of a permit "under this chapter does not relieve [a permittee] from any civil liability." 351 S.W.3d at 312; TEX. WATER CODE § 27.104 (West 2008).

The court differentiated this case from those upon which the Beaumont Court of Appeals originally relied by clarifying that “the rule of capture is not applicable to wastewater injection.” 351 S.W.3d at 314. A landowner cannot necessarily drill a well and protect his interest by stopping wastewater from trespassing into his subsurface the way a mineral owner can drill a well to protect his interest from other mineral owners. *Id.* The court did not decide “whether subsurface water migration can constitute a trespass” and remanded the case to the Court of Appeals to determine the issues presented by FPL that the Court of Appeals originally did not answer. *Id.* at 315.

THE BEAUMONT COURT OF APPEALS DECISION ON REMAND

On remand, the Beaumont Court of Appeals reversed and remanded the case to the trial court for a new trial. *FPL Farming Ltd. v. Envtl. Processing Sys., L.C.*, 383 S.W.3d 274 (Tex. App. —Beaumont 2012, pet. filed).

One of the main issues originally presented by FPL was “whether the burden of proof was erroneously shifted to FPL in the jury charge.” 351 S.W.3d at 315. FPL contended that the trial court erred by giving a jury instruction that “erroneously placed the burden of proving lack of consent on it, rather than requiring EPS to prove FPL consented to EPS’s causing or permitting the waste plume to cross the boundaries of FPL’s property.” 383 S.W.3d at 282. Because the Texas Supreme Court has not decided a case to determine where the burden should be placed, the Court of Appeals first looked at several other court of appeals decisions that have placed the burden on the party that is alleged to have trespassed. *Id.* The court then considered principles of burden allocation such as the difficulty in proving a negative and the Restatement (Second) of Torts which states, “in trespass cases the burden of establishing the possessor’s consent is upon the person who relies upon it.” *Id.* at 284–85 (quoting the Restatement (Second) of Torts). The court held that “the charge improperly placed the burden of proving lack of consent on FPL and the trial court should have placed the burden on EPS.” *Id.* Because of this, the court also held that “because the charge required FPL to prove an element on which it did not bear the burden of proof, because that issue was hotly contested, and because EPS used the error to its advantage in final argument we hold the trial court’s error was harmful.” *Id.* at 285.

EPS raised another issue, claiming that trespass law in Texas does not extend to the subsurface depths where FPL alleges it was harmed. *Id.* The Court of Appeals determined that Texas law does recognize a claim for trespass of subsurface briny water. *Id.* at 281-82. The court cited two Texas Supreme Court cases, *Gregg v. Delhi-Taylor Oil Corp.*, 344 S.W.2d 411 (Tex. 1961), and *Hastings Oil Co. v. Tex. Co.*, 234 S.W.2d 389 (Tex. 1950), where the court “by implication, recognized that the law of trespass applies to invasions occurring on adjacent property but at a level beneath the surface.” *Id.*

The Court of Appeals used both the Legislature and Texas Supreme Court decisions to determine that an owner of the surface has interests in the groundwater and subsurface briny water is treated the same as groundwater and therefore can be protected from invasions in trespass. *Id.* at 281. In *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012), the Texas Supreme Court recognized that those owners with an interest in the surface also have an interest in the water below the surface and may use the remedies provided by trespass when that interest in the water below the surface is violated. *Id.* at 842. While *Day* dealt with groundwater and not the briny water FPL claimed had been invaded, the Court of Appeals determined that the briny water is treated the same as

groundwater using the Texas Supreme Court's decision in *Robinson v. Robbins Petroleum Corp., Inc.*, 501 S.W.2d 865 (Tex. 1973), which stated "the owner of the surface also owns the saltwater in place beneath the surface." *FPL Farming Ltd.*, 383 S.W.3d at 279-80.

EPS argued that its permit allows it to use the "storage potential of the unexploited space below FPL's tract," but the court rejected this argument in favor of protecting the "owner's right to the exclusive use of its property." *Id.* at 281. Some are concerned with the impact this could have on groundwater storage projects in Texas because the "language used by the court and the rationale would also likely apply to aquifer storage and recovery projects." Wes Strickland, *Arizona, Texas Courts Navigate Water Cases*, American Water Intelligence (October 2012), <http://www.americanwaterintel.com/archive/3/10/analysis/arizona-texas-courts-navigate-water-cases.html>.

The court was also asked to decide whether EPS's waste plume did actual harm. *FPL Farming Ltd.*, 383 S.W.3d at 287. The court "decline[d] to hold that the trespass was *de minimis* in a case where a jury might find that EPS's operations permanently damaged a natural resource, water, owned by FPL." *Id.*

Because of the improper burden placement for consent, the court reversed the trial court's judgment and remanded for a new trial. *Id.* These opinions could adversely affect permittees for injection wells under TWC Chapter 27. TCEQ states in all of its Underground Injection Control permits that the permit does not grant any property rights for the purpose of injecting substances underground. 30 TEX. ADMIN. CODE §§ 305.22(b) & (c) (2012) (Tex. Comm'n on Env'tl. Quality); *see also* TEX. WATER CODE § 27.104 (West 2008). Important future issues are whether EPS can show FPL consented to the injection and whether FPL can show damages, on remand.

Cross-petitions for review have been filed with the Texas Supreme Court and remain pending.

Ali Abazari is senior counsel in the regulatory and legislative section of Jackson Walker, L.L.P. Mr. Abazari specializes in solid waste, remediation, surface mining, and industrial waste water permitting and compliance counseling. He previously served as a regulatory specialist at URS Corporation and as an attorney in the Litigation Division of the Texas Commission on Environmental Quality.

Robin Smith is an attorney with the Texas Commission on Environmental Quality. Ms. Smith handles water rights, municipal solid waste, water quality and hazardous waste area matters. She has also worked with the Texas Water Commission, the Texas Supreme Court, and the Dallas Court of Appeals.

Kristin Garrett is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

WATER QUALITY

PROPOSED RULES AFFECTING UTILITY REGULATIONS & WATER DISTRICTS

INTRODUCTION

On October 17, 2012, the Texas Commission on Environmental Quality (TCEQ) proposed rules affecting utility regulations and water districts. The new rules were adopted with minor changes in April 2012. 38 Tex. Reg. 2365-74. The rules concern a number of bills passed in 2011 by the 82nd Legislature amending the Texas Water Code. Specifically, TCEQ proposed adopting changes mandated by House Bill (H.B.) 679, H.B. 1901, Senate Bill (S.B.) 18, S.B. 512, S.B. 573, S.B. 914, and S.B. 1234. The new rules align the language in Chapters 291 and 293 of Title 30 of the Texas Administrative Code with the revised language of the Texas Water Code and the Local Government Code. See 37 Tex. Reg. at 8731, 8741 (codified at 30 TEX. ADMIN. CODE §§ 291 and 293). This comment details the substance rules' and their potential effect on the public and the regulated community.

AMENDMENTS TO CHAPTER 293 – WATER DISTRICTS

H.B. 679: TAC currently allows for an exemption from Commission approval when change orders are for \$25,000 or less. 30 TEX. ADMIN. CODE §§ 293.81(b) and (c) (2011) (Tex. Comm'n on Env'tl. Quality). H.B. 679 increased the exemption for change orders to \$50,000. This rule gives contract managers broader authority to approve change orders without seeking approval from the Commission. 37 Tex. Reg. at 8742 (codified at 30 TEX. ADMIN. CODE § 293.81(2) and (3)).

H.B. 1901: H.B. 1901 carved out an exemption from the TCEQ Executive Director's bond approval provisions, provided that the bonds issued by the public utility meet specified requirements. TEX. WATER CODE ANN. §§ 49.181 (a) and (h), 49.052(f), 49.183(d) (West 2011). The current framework for a water district's sale of bonds includes a number of exemptions. See 30 TEX. ADMIN. CODE § 293.41 (2011) (Tex. Comm'n on Env'tl. Quality). The new rule further allows exemptions from TCEQ's approval of the issuance of bonds by a public utility agency if it is a municipal utility district (MUD) that includes territories in only two counties, has outstanding long-term indebtedness that is rated BBB or better by a nationally-recognized rating agency, and has at least 5,000 active water connections. 37 Tex. Reg. at 8751–52 (codified at 30 TEX. ADMIN. CODE § 293.41(a) and (d)). TCEQ anticipates that this amendment will affect water utilities by providing another opportunity for a bond exemption; however, it should not affect the general public. *Memorandum from L'Oreal W. Stepney, Deputy Director, Office of Water, to TCEQ Commissioners* (Sept. 28, 2012), available at http://www.tceq.texas.gov/assets/public/legal/rules/rule_lib/proposals/11055293_pex.pdf.

S.B. 18: TCEQ rules enumerate limitations on the use of eminent domain by MUDs. 30 TEX. ADMIN. CODE § 293.51(2011) (Tex. Comm'n on Env'tl. Quality). Consistent with S.B. 18, the new rules further limit a MUD's power of eminent domain outside of its district boundaries. See TEX. WATER CODE ANN. § 54.209(e) (West 2011).

Notably, the new regulations further restrict eminent domain power for sites or easements for road projects. 37 Tex. Reg. at 8753–54 (codified at 30 TEX. ADMIN. CODE § 293.51(e)(2) – (4), (g)). These additional limitations on MUDs' authority to use eminent domain could affect utility districts and the general public. And while this relates to real property rights, TCEQ does not anticipate the regulations generating takings claims because this provision limits the district's power of using eminent domain. *Id.* at 8743.

S.B. 512: The existing regulations require that a director of a fresh water supply district (FWSD) must be: (1) a registered voter of the district; (2) the owner of taxable property in the district; and (3) at least 18 years of age; or, if the director is seeking election in a district located partly in Denton County, that person must be a registered voter of the district but need not own taxable land in that district. 30 TEX. ADMIN. CODE § 293.32 (2011) (Tex. Comm'n on Env'tl. Quality). Consistent with S.B. 512, the new rules allow a supervisor to be qualified if the person was a registered voter of the district. 37 Tex. Reg. at 8750 (codified at 30 TEX. ADMIN. CODE § 293.32(a)(1)(B)). This amendment changes the election qualification in a way that was previously only available in Denton County.

S.B. 914: S.B. 914 concerns issuance of bonds; and, similar to H.B. 1901, TCEQ's new rules also amended 30 TAC § 293.41 to add an exemption from Executive Director approval for bonds. The new rules make 30 TEX. ADMIN. CODE § 293.41 consistent with TEX. WATER CODE § 49.181 by offering conservation and reclamation districts an exemption if they are located in at least three counties that have the rights, powers, privileges, and functions applicable to a river authority. 37 Tex. Reg. at 8751–52 (codified at 30 TEX. ADMIN. CODE § 293.41(a) and (d)). By offering an exemption, the new rules have the potential to affect utilities districts, but should not have a bearing on the general public nor on property rights. See *Memorandum from L'Oreal W. Stepney* at 4.

S.B. 1234: Under prior TCEQ rules, to create a municipal management district (MMD), the petition had to describe the proposed district's boundaries by: (1) metes and bounds, or (2) lot and block number if there was a recorded map or plat and survey. 30 TEX. ADMIN. CODE § 293.11(j)(1)(a) (2011) (Tex. Comm'n on Env'tl. Quality). Adoption of the new rule allows the MMD boundaries to be described using verifiable landmarks in its boundary description. 37 Tex. Reg. at 8750. Thus, this gives greater flexibility in creating MMDs.

AMENDMENTS TO CHAPTER 291 – UTILITY REGULATIONS

S.B. 573: Adoption of S.B. 573 resulted in significant amendments to the existing law regarding certificates of public convenience and necessity (CCNs). 37 Tex. Reg. at 8731; 38 Tex. Reg. 2365. Approval of the new rules made a number of changes to the issuance and regulation of CCNs by amending 30 TAC §§ 291.22, 291.102, 291.105, and 291.113. 37 Tex. Reg. at 8731; 38 Tex. Reg. 2365.

The administrative requirements regarding notice to change rates were amended to further require the utility to: (1) disclose any ongoing proceeding to revoke or amend a CCN under 30 TEX. ADMIN. CODE § 291.113; (2) give the reason(s) for the proposed rate change; and (3) give notice of any bill payment assistance program available to low-income ratepayers. See 38 Tex. Reg. at 2366, 2369 (codified at 30 TEX. ADMIN. CODE §§ 291.22).

Previous TCEQ regulations allowed landowners meeting certain specifications to elect to exclude part or all of their property from a proposed CCN. 30 TEX. ADMIN. CODE § 291.102(h) (2011) (Tex. Comm'n on Env'tl. Quality). Consistent with S.B. 573, the new rules ensure that a CCN holder is not required to provide service to any landowner that has opted out of the CCN. See 37 Tex. Reg. at 8736 (codified at 30 TEX. ADMIN. CODE § 291.102).

The new rules also amended 30 TEX. ADMIN. CODE § 291.105(b)(4) and now allow TCEQ to grant a retail public utility a CCN without consent of a municipality for service areas within the boundaries or the extraterritorial jurisdiction (ETJ) of the municipality if: (1) the municipality has not consented before the 180th day after a landowner or retail public utility has requested a CCN; (2) the municipality has not consented before the 180th day after a public utility requested a CCN and TCEQ finds that the municipality does not have the ability to provide service or has not made a good faith effort to provide service; (3) the municipality has not entered into a binding agreement to serve the area that is the subject of the application before the 180th day after a formal request was made; (4) a landowner or public utility submitted a formal request and did not unreasonably refuse to comply with the municipality or enter into a contract for water or sewer services; or (5) the municipality refused to provide service in the area. 37 Tex. Reg. at 8738 (codified at 30 TEX. ADMIN. CODE § 291.105 (b)(4 - 5)).

Further, these amendments amend 30 TEX. ADMIN. CODE § 291.105(b)(6) to provide that, should TCEQ grant a CCN, it must be conditioned with the requirement that all water and sewer facilities be designed and constructed in accordance with a municipality's standards. 37 Tex. Reg. at 8738-39 (codified at 30 TEX. ADMIN. CODE § 291.105(c)(1) and (c)(2)). The new regulations amend 30 TEX. ADMIN. CODE § 291.105(c)(1) to specify that TCEQ may not extend a CCN beyond a municipality's ETJ if a landowner wholly or partly outside the ETJ elects to exclude all or part of his land within the proposed service area—unless the proposal concerns the transfer of a certificate approved by TCEQ. 37 Tex. Reg. at 8738–39.

The regulations alter the current framework for TCEQ's revocation of a CCN. The new rules amended 30 TEX. ADMIN. CODE § 291.113(b) to provide that a certificate holder's status as a borrower under a federal loan program does not bar a request to release land and receive services from a different provider. 38 Tex. Reg. at 2370. The new rules also amended 30 TEX. ADMIN. CODE § 291.112(a) to add two additional criteria to be proved by petitioners requesting their land be removed from a CCN, such that a petitioner must: (1) file a written request for service to the certificate holders approximating the cost for an alternative provider; and (2) specify the flow and pressure requirements and infrastructure line size and system capacity for the required level of fire protection. 37 Tex. Reg. at 8732. TCEQ also amended 30 TEX. ADMIN. CODE § 291.113(b)(3)(B) to require TCEQ to consider the alternative provider's capability of providing the same level of service. 38 Tex. Reg. 2370. TCEQ shortened the review period for granting/denying petitions from 90 to 60 days, by amending 30 TEX. ADMIN. CODE § 291.113(d). This also added a provision to 30 TEX. ADMIN. CODE § 291.113(r) allowing a petition for expedited release of properties from CCNs if the land in question meets the specified requirements and is within certain counties. 38 Tex. Reg. 2371. The amendments also provide additional requirements for those filing a petition for expedited release of CCNs. *Id.*

TCEQ analyzed the potential for the amendments from S.B. 573 to affect government costs, takings issues, and coastal management programs. 37 Tex. Reg. at 8734. However, TCEQ concluded that the amendments would not have any significant effects on government costs, would not give rise to takings claims, and would not affect any coastal management programs. *Id.* TCEQ identified a potential impact on retail utilities when CCN exemptions are requested, but confined that issue to counties lacking water or sewer services. *Id.* Finally, while S.B. 573 created a new class of affected persons, the new rule changes establish a procedure for requesting an expedited release from current CCNs. *Id.* at 8733.

Emily Rogers is a partner practicing environmental law and water and wastewater utility law at Bickerstaff, Heath, Pollan & Caroom, L.L.P. in Austin. Ms. Rogers is a graduate of the University of Houston Law Center and formerly served as an attorney for the Texas Natural Resource Conservation Commission.

Merrill Jones is a third-year student at The University of Texas School of Law and a staff member of the Texas Environmental Law Journal.

WATER RIGHTS

WYNNE V. KLEIN, NO. 03–11–00574–CV, 2012 WL 5392142, *2 (TEX. APP.—AUSTIN OCT. 31, 2012, PET. DENIED FEB. 8, 2013)

In a case that could potentially affect the operations of the Lower Colorado River Authority (LCRA) and Texans from the central region to the Gulf, the Texas Court of Appeals in Austin dismissed a suit that attempted to hold LCRA liable for substantially draining Lake Travis during the recent drought that has plagued much of Texas. *Wynne v. Klein*, No. 03–11–00574–CV, 2012 WL 5392142, *2 (Tex. App.—Austin Oct. 31, 2012, pet. denied Feb. 8, 2013).

In what has been said to be one of the worst droughts in Texas history, the State has been facing the major issue of water conservation. *See, e.g., Texas Drought*, LCRA, <http://www.lcra.org/water/drought/index.html> (last updated Feb. 15, 2013). 2011 was the driest year ever in Texas. *Everything You Need to Know About the Texas Drought*, STATE IMPACT (NPR), <http://stateimpact.npr.org/texas/tag/drought> (last visited Jan. 19, 2013). Lakes Travis and Buchanan, the region's water supply reservoirs, depend on rain to feed the rivers, creeks and other tributaries that fill them. *Texas Drought*, LCRA, <http://www.lcra.org/water/drought/index.html> (last updated Feb. 15, 2013). Because of the prolonged drought, the amount of water flowing into the lakes (inflows) has been historically low. *Id.* Inflows in 2011 were the lowest in history, at about 10 percent of average, and inflows in 2012 were the fifth lowest in history, at about 32 percent of average. *Id.* Although there was some relief in 2012, there is no definitive end to the drought in sight. *Everything You Need to Know About the Texas Drought*, STATE IMPACT (NPR), <http://stateimpact.npr.org/texas/tag/drought> (last visited Jan. 19, 2013). Due to the lake levels, LCRA obtained emergency relief from the Texas Commission on Environmental Quality to limit the water releases from the lakes for downstream irrigation. Becky

Motal, Stubborn Drought, Dry Forecast Drives Emergency Request, LCRA (Jan. 14, 2013), http://www.lcra.org/newsstory/2013/drought_dry_forecast_drives_emergency_request.html.

LCRA is a conservation and reclamation district created by the Texas Legislature in 1934. TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.001 (West 2012); *The ABCs of LCRA*, LCRA, <http://www.lcra.org/about/overview/index.html> (last updated Jan. 25, 2013). It is a nonprofit public utility that manages the water along the Highland Lakes and lower Colorado River in Central Texas all the way to Matagorda Bay. *The ABCs of LCRA*. Its authority is granted under the Texas Constitution Article XVI, § 59(a), which provides:

The conservation and development of all of the natural resources of this State, and development of parks and recreational facilities, including the control, storing, preservation and distribution of its storm and flood waters, the waters of its rivers and streams, for irrigation, power and all other useful purposes, the reclamation and irrigation of its arid, semiarid and other lands needing irrigation, the reclamation and drainage of its overflowed lands, and other lands needing drainage, the conservation and development of its forests, water and hydro-electric power, the navigation of its inland and coastal waters, and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.

Tex. Const. art. XVI, § 59(a).

Appellant Robert L. Wynne, D.D.S., a lakeside resident, sued the members of the board of directors of the LCRA (the Board) in their official capacities, seeking to hold them liable for causing low water levels in Lake Travis through alleged unconstitutional acts during 2008 and for most of 2009 through 2011. *Wynne*, 2012 WL 5392142, at *2.

Wynne contended the following activities were beyond the scope of the Board's constitutional authority:

- (1) Owning or operating gas or coal-fired electrical generating plants which “demands and consumes water from Lake Travis”;
- (2) Selling water to the South Texas Nuclear Project;
- (3) Selling water downstream of Lake Travis for non-irrigation purposes; and
- (4) Permitting too much water from the Colorado River to flow into Matagorda Bay and its estuaries.

Id.

The Board filed a plea to the jurisdiction, asserting that sovereign immunity barred the suit because LCRA is a governmental agency and political division of the State and is immune from such suits unless the legislature has expressly waived it or when government officers act “without legal authority or failed to perform a purely ministerial act.” *Id.* at *1. It also contended that Wynne lacked standing to bring suit. *Id.*

On October 31, 2012, the Austin Court of Appeals affirmed the trial court's dismissal of the suit, which Wynne argued allows LCRA limitless authority over the uses of the Colorado River's water. *Id.* The court held that none of the complaints in Wynne's petition constituted an ultra vires act and therefore the Board's sovereign immunity barred Wynne's suit. *Id.* at *4.

Wynne's first complaint was based on his interpretation of the word "power," which he argued referred exclusively to hydroelectric power, not the gas or coal-fired electric plants LCRA currently operates. *Id.* at *2. The court, however, held that a plain reading of the provision allows LCRA to use the water for the generation of any power or any "useful purpose." *Id.* at *2. The court applied the same logic to Wynne's second contention, that LCRA cannot sell water to a nuclear power plant. *Id.* at *3. LCRA's enabling act permits it to "develop and generate water power and electric energy." TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.004(d). In 1975, LCRA's enabling act was amended to allow the authority to develop all types of energy, not just hydropower. See *Id.* § 8503.013(c).

Wynne also argued that LCRA is not authorized to sell water for any revenue-generating purposes, which leads into his third complaint. *Wynne*, 2012 WL 5392142, at *3. In Wynne's petition to the Supreme Court of Texas, he argued that the generation of revenues is outside LCRA's constitutional scope and that LCRA should operate by levying taxes. Brief for Petitioner at 8, *Wynne v. Klein*, 2012 WL 5392142 (2012) (No. 12-0985). The appeals court found that merely generating revenue does not render acts as beyond the scope of permitted activities. *Wynne*, 2012 WL 5392142, at *3. Article XVI, § 59(c) of the Texas Constitution allows the Legislature to empower a conservation and reclamation district to levy taxes, but LCRA has never been granted such authority. TEX. CONST. art. XVI, § 59(c). In fact, LCRA is statutorily-prohibited from imposing a tax. See TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.001(c).

Wynne's fourth complaint, that LCRA has wasted water by allowing too much to flow into the Matagorda Bay, targets the discretion the Board has in addressing water needs for the river and estuarine systems. *Wynne*, 2012 WL 5392142, at *3. Wynne contended that by exceeding minimum "target inflow needs" of Matagorda Bay, water was being wasted. *Id.* Rejecting this contention, the court gave deference to the Board's discretion and found no prohibition on exceeding minimum water flow requirements. *Id.* at *4.

Having found that none of Wynne's four complaints constituted ultra vires acts, the court held that Wynne's claims were barred by sovereign immunity. *Id.* Because the claims were otherwise barred, the court had no need to address Wynne's standing to bring the claim. *Id.*

Stephanie Trinh will be a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

FEDERAL CASENOTE

NAVIGABILITY OF THE COLORADO RIVER LAKES

In a recent case, Michael L. MacGowan filed a pro se suit in federal court claiming admiralty jurisdiction based on his alleged rescue of an unmanned jet ski on Lake Lyndon B. Johnson (Lake LBJ). *MacGowan v. Cox*, No. 11-50415, 2012 WL 3892645, at *1 (5th Cir. Sept. 7, 2012) (per curiam). MacGowan sought half the value of the vessel as

a salvage fee. *Id.* The district court found that Lake LBJ was landlocked, bounded by impassable dams, and located entirely within a single state. *Id.* Thus, the court dismissed the case for lack of subject matter jurisdiction, holding that Lake LBJ was not a navigable waterway for the purpose of admiralty jurisdiction. *Id.* In a brief opinion, the Fifth Circuit Court of Appeals affirmed the district court's decision on the same reasoning, citing a prior opinion in which the court stated that a body of water contained in Louisiana and blocked by dams was not navigable for admiralty jurisdiction purposes because interstate travel via the waterway was not possible. *Id.*

NAVIGABLE WATERS

When examining judicial precedent concerning “navigable waters,” it is important to consider the purpose for which the concept was invoked in a given case. *Kaiser Aetna v. United States*, 444 U.S. 164, 171 (1979). As recently as this year, the U. S. Supreme Court identified several distinct concepts that the term “navigable waters” is used to define: 1) to determine state title under the equal-footing doctrine; 2) to define the scope of Congress' regulatory authority under the Commerce Clause; 3) to determine the extent of the U.S. Army Corps of Engineers' (Corps) authority under the Rivers and Harbors Appropriation Act of 1899; and 4) to establish the limits of federal court admiralty and maritime jurisdiction. *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215, 1228 (2012); *Kaiser*, 444 U.S. at 171–72. As a result, the analysis of navigability is largely dependent upon the circumstances of each case.

Under these concepts, there are starkly differing standards for branding waters as “navigable.” For instance, navigability is determined at the time of statehood and based on the “natural and ordinary condition” of the water for purposes of the equal-footing doctrine. *Montana*, 132 S. Ct. at 1228 (quoting *Oklahoma v. Texas*, 258 U.S. 574, 591 (1922)). By contrast, when analyzing the scope of Congress' Commerce Power, it is important to consider waters that “were once navigable but are no longer,” as well as waters that “are not navigable and never have been but may become so by reasonable improvements.” *Montana*, 132 S. Ct. at 1228 (citing *Econ. Light & Power Co. v. United States*, 256 U.S. 113, 123–124 (1921) and *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407–08 (1940)). The authority of the Corps restricted navigable waters defined to include “relatively permanent, standing or continuously flowing bodies of water.” *Rapanos v. United States*, 547 U.S. 715, 739 (2006).

In establishing the limits of admiralty jurisdiction, the Supreme Court has greatly limited the definition of navigable waters. The Court has established a two-pronged test to determine whether admiralty jurisdiction applies:

[A] party seeking to invoke federal admiralty jurisdiction pursuant to 28 U.S.C. § 1333(1) over a tort claim must satisfy conditions both of location and of connection with maritime activity. A court applying the location test must determine whether the tort occurred on navigable water or whether injury suffered on land was caused by a vessel on navigable water.

Jerome B. Grubart, Inc. v. Great Lakes Dredge & Dock Co., 513 U.S. 527, 534 (1995). Thus, to establish admiralty jurisdiction, a court must determine that both the location and connection tests have been fulfilled.

Waters meet the location prong of the admiralty jurisdiction test “when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign

countries in the customary modes in which such commerce is conducted by water.” *The Daniel Ball*, 77 U.S. 557, 563 (1870). Four years later, the Court elaborated on its test, stating that a body of water may still be navigable “although its navigation may be encompassed with difficulties by reason of natural barriers, such as rapids and sand-bars.” *The Montello*, 87 U.S. 430, 443 (1874). The Fifth Circuit Court of Appeals has added that “distinctions between natural and man-made bodies of water are immaterial.” *Sanders v. Placid Oil Co.*, 861 F.2d 1374, 1377 (5th Cir. 1988). The Fifth Circuit has further explained that admiralty jurisdiction should be “as readily ascertainable as courts can make it.” *Richardson v. Foremost Ins. Co.*, 641 F.2d 314, 316 (5th Cir. 1981), *aff’d*, 457 U.S. 668 (1982). Accordingly, while a waterway must be capable of being used in interstate or foreign commerce, it does not have to currently be used for commercial activity to satisfy the connection test. *Id.* To satisfy the connection test, a court must determine if the “general features of the type of incident involved . . . has a potentially disruptive impact on maritime commerce” and “whether the character of the activity giving rise to the incident shows a substantial relationship to maritime activity.” *Jerome B. Grubart, Inc. v. Great Lakes Dredge & Dock Co.*, 513 U.S. 527 (1995) (quoting *Sisson v. Ruby*, 497 U.S. 358, 362 (1990)).

LAKE LBJ

In *MacGowan*, the court applied the location prong of the admiralty jurisdiction test to Lake LBJ. No. 11-50415, 2012 WL 3892645, at *1 (5th Cir. Sept. 7, 2012) (per curiam). Lake LBJ is located on the Colorado River, the source of which is situated in Dawson County, Texas in far west Texas and mouth of which empties into the Gulf of Mexico at Matagorda County, Texas. The Colorado River and Lake LBJ are located entirely within the state of Texas and are therefore unable to carry commerce directly to any other state. Consequently, for Lake LBJ to be considered navigable, commerce must be capable of traveling from the lake, down the Colorado River, and into the Gulf of Mexico. As stated by the court in *MacGowan*, however, Lake LBJ is bounded by impassable dams. *Id.* Though courts have stated that natural barriers only making travel more burdensome may not prevent a waterway from being navigable, these structures make it impossible for any vessel to reach the Gulf of Mexico through Lake LBJ. Therefore, Lake LBJ is incapable of supporting interstate or foreign commerce and fails the location prong of the admiralty jurisdiction test. The *MacGowan* court did not provide any analysis of the connection prong, as failure of the location prong was sufficient to render admiralty jurisdiction inappropriate.

IMPACT

While short and unpublished, the *MacGowan* opinion provides potentially important analysis. The opinion provides a forecast of how the court is likely to apply the location prong of the admiralty jurisdiction test to similarly-situated lakes.

David J. Klein is a member of the Lloyd Gosselink Rochelle & Townsend, P.C.’s Water and Districts Practice Groups in Austin, where he focuses on representing water utilities, municipalities, water districts, water authorities and landowners with their water supply, water quality, and water and sewer utility service interests. Mr. Klein earned his J.D. from The John Marshall Law School in Chicago, Illinois.

Erik Combs is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

STATE CASENOTE

***HOUSTON AUTO M. IMP. N., LTD. v. R & A HARRIS S., L.P.*, 2012 WL 3628878 (TEX. APP.—HOUSTON [1ST DIST.] AUG. 23, 2012, NO PET. H.)**

On August 23, 2012, Houston's First District Court of Appeals affirmed a district court judgment awarding declaratory relief and damages to R & A Harris South, L.P., (R & A Harris) for a breach of contract claim related to soil and groundwater contamination from underground storage tanks. *Houston Auto M. Imp. N., Ltd. v. R & A Harris S., L.P.*, 2012 WL 3628878, *1 (Tex. App.—Houston [1st Dist.] Aug. 23, 2012, no pet. h.). On appeal, the defendant, Houston Auto M. Imports North, Ltd. (Houston Auto), asserted that: (1) the evidence was legally and factually insufficient to support the damages awarded; (2) the terms of the contract at issue had been misconstrued; (3) the relief granted was beyond that provided for under the Uniform Declaratory Judgments Act (UDJA); and (4) the affirmative defenses of limitations and laches were denied in error. *Id.*

In February 2002, Houston Auto and R & A Harris entered into a contract for the sale of real property owned by Houston Auto. *Id.* Before closing, the parties discovered that a previously-removed underground storage tank (UST 3) had leaked chlorinated solvents that contaminated the soil and groundwater. *Id.* In June 2002, the parties amended their original Purchase and Sale Agreement and delayed the closing. *Id.*

The parties executed a Second Amendment to Agreement of Purchase of Sale (Second Amendment) that allocated responsibility for the contamination in June 2002. *Id.* Section 2 of that agreement provided that Houston Auto, "at its sole cost and expense, shall immediately commence and diligently pursue to completion in good faith all action necessary to remediate . . . the soil and groundwater contamination associated with the release of chlorinated solvents" found on the property. It further required Houston Auto to "remediate as necessary . . . all contamination which may arise from the potential offsite migration, if any, of the groundwater and soil contamination." *Id.*

The parties' Second Amendment also included a broad indemnification clause that required Houston Auto to indemnify R & A Harris "against any claims, demands, liability, loss, damages, fines, costs or expenses [R & A Harris] may incur or which may be asserted against [R & A Harris] as a result of or arising out of the foregoing soil and groundwater contamination . . . including without limitation, reasonable attorneys' fees and related costs and expenses paid or incurred by [R & A Harris]." *Id.* at *2. In August 2002, the parties also entered into a Mutual Environmental Indemnity Agreement providing that Houston Auto would indemnify R & A Harris against "any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, judgments, costs, expenses and disbursements" arising from the removal of hazardous waste on the property. *Id.*

With the foregoing agreements in place, the parties closed the sale of the property on August 23, 2002. The parties then entered into the Voluntary Cleanup Program (VCP) of the Texas Commission on Environmental Quality (TCEQ). Pursuant to the VCP, in February 2004, TCEQ approved Houston Auto's Response Action Plan that proposed remediation of contamination through a process of monitored natural attenuation, including quarterly tests of groundwater at a number of monitoring wells. *Id.*

Initial sampling by R & A Harris in 2004 and 2005 indicated that groundwater was contaminated beyond acceptable levels at Monitoring Well 1 (MW-1), located at the former location of UST 3, as well as at Monitoring Well 3 (MW-3) located down-gradient. *Id.* at *3. By November 2004, contamination levels at Monitoring Well 7 (MW-7), located further down-gradient from MW-3, just met the accepted limits. *Id.* Although Houston Auto failed to collect additional samples as scheduled, the samples it did collect demonstrated the increasing spread of contamination. *Id.*

Throughout 2006, R & A Harris's environmental consultant expressed concern that the contamination was spreading and required immediate active remediation. *Id.* By mid-2007, Houston Auto implemented active remediation through chemical injection into the groundwater. *Id.* at *4. Concerned about the continued spread of contamination, and after failing to persuade Houston Auto to do so, R & A Harris installed additional monitoring wells at its own expense. *Id.* In response to continued delay and inaction by Houston Auto, in 2009 R & A Harris independently prepared and submitted an active remediation plan to TCEQ. *Id.* at *5. That plan was ultimately withdrawn upon Houston Auto's eventual submission and implementation of a comparable plan. *Id.*

R & A Harris sought damages and reasonable attorneys' fees stemming from Houston Auto's alleged breach of contract for failure to "immediately commence and diligently pursue to completion all action necessary to remediate" the contamination and not "obtain[ing] regulatory approval or closure of the remediation within a reasonable time after closing of the purchase." *Id.* at *5. The district court found that R & A Harris had provided notice of its dissatisfaction to Houston Auto. *Id.* at *6. The court further found that Houston Auto had "not exercised diligence by taking all action necessary." *Id.* The court awarded \$116,975.44 for R & A Harris's expenses resulting from Houston Auto's failure to fulfill its contractual obligations. *Id.* The court further declared that, under the parties' agreements, Houston Auto would be liable for similar future costs. *Id.*

On appeal, Houston Auto challenged the district court's construction of the parties' agreements and the sufficiency of the evidence of a breach. *Id.* at *7. The Court of Appeals overruled both issues. It held that the contract required more than compliance with TCEQ standards; namely, immediate and diligent remediation efforts. *Id.* at *8. The Court of Appeals further held that the district court could have reasonably found a failure to diligently pursue remediation based on Houston Auto's awareness of migration, inconsistent monitoring efforts, and pattern of late reporting, in combination with the increasing spread of contamination over eight years. *Id.* at *10.

Houston Auto further challenged the award and amount of damages. It asserted that damages should not have been awarded under either the indemnity provision of the Second Amendment or the Mutual Environmental Indemnity Agreement. *Id.* at *11. Strictly construing the agreements, the Court of Appeals rejected Houston Auto's argument that it was not required to compensate R & A Harris for "voluntary" or independently incurred expenses. *Id.* at *12. Rather, the Court of Appeals concluded that the

agreements required indemnification for any costs with a causal connection to the relevant soil and groundwater contamination. *Id.*

Finally, Houston Auto challenged the declaration by the trial court that Houston Auto would be liable for further expenses relating to remediation under the indemnification clauses, asserting that it amounted to an advisory opinion. The Court of Appeals affirmed the holding below, finding that the declaration merely “declared the rights of the parties under the Second Amendment as authorized by [the UDJA],” and therefore was not an advisory opinion. *Id.* at *13.

Howard Slobodin received his B.A. from the University of Oregon in 1998 (cum laude) and his J.D. from the University of Texas School of Law in 2001 (with honors). Mr. Slobodin is the General Counsel and Secretary, Board of Directors, of the Trinity River Authority of Texas in Arlington.

Cassandra McCrae is a third-year student at The University of Texas School of Law and is now the Student Editor-in-Chief of the Texas Environmental Law Journal.

P U B L I C A T I O N S

MARK A. LATHAM, *THE BP DEEPWATER HORIZON: A CAUTIONARY TALE FOR CCS, HYDROFRACKING, GEOENGINEERING AND OTHER EMERGING TECHNOLOGIES WITH ENVIRONMENTAL AND HUMAN HEALTH RISKS*, 36 WM. & MARY ENVTL. L. & POL’Y REV. 31 (2011)

In his article on environmental technology regulations, Mark A. Latham uses the BP Deepwater Horizon spill as a lens through which to explore the potential, risks, and regulations of three technologies: carbon capture and sequestration (CCS), hydraulic fracturing, and geoengineering. Mark A. Latham, *The BP Deepwater Horizon: A Cautionary Tale for CCS, Hydrofracking, Geoengineering and Other Emerging Technologies with Environmental and Human Health Risks*, 36 WM. & MARY ENVTL. L. & POL’Y REV. 31, 32–33 (2011). Latham ultimately finds the regulations lacking and prescribes general regulatory guidelines for dealing with technological advancements that may have an environmental impact.

The Deepwater Horizon was “an illustration of how far oil exploration and production technology have advanced.” *Id.* at 33 (citing NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, REPORT TO THE PRESIDENT, DEEPWATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING viii (Jan. 2011)). The technological advancement embodied by the Deepwater Horizon was the ability to drill for oil in deep waters. *Id.* at 33–34. Deepwater Horizon was able to drill through “5000 feet of water . . . [and] 13,000 feet beneath the ocean floor.” *Id.* at 35. These depths are “technically demanding” and require “sophisticated drilling technology.” *Id.*

Given the degree of difficulty associated with deep-water drilling, there are a number of risks, including a “blowout.” *Id.* A blowout is caused by a loss of pressure control in

the well, which is safeguarded by a blowout preventer.¹ *Id.* at 36 (citation omitted). The Deepwater Horizon oil spill resulted from a blowout. *Id.* at 35. At the time of the spill, deep-water oil exploration and production rigs were “required to have blowout preventers in place as a last resort pressure control mechanism.” *Id.* at 36 (citing 30 C.F.R. §§ 250.401(a), 250.440 (2010)).

A loss in well pressure coupled with the failure of a blowout preventer was the cause of the BP Deepwater Horizon oil spill. *Id.* at 39. Latham argues that this “worst case scenario” might have been prevented with a better regulatory structure. *Id.* Since the blowout preventer is the last resort device for deep-water oil drilling, it needs to be highly reliable. *Id.* at 37. However, blowout preventers have failed to keep pace with other technological advancements in deep-water oil drilling. *Id.* at 37–38. Not only were these blowout preventers unreliable, but this fact was also well-known to those in the industry. *Id.*

Latham argues that, while regulations ought not hinder technological innovation, they must ensure there are “fail-safe measures appropriate to the level of risk presented to human health and the environment.” *Id.* at 39, 40. Ultimately, to prevent a recurrence of a Deepwater Horizon-type disaster, “it is crucial that risks be understood and appropriate measures be put in place by industry, regulators, and policymakers to address recognized worse [sic] case environmental and human health risk scenarios.” *Id.* at 40.

A. CARBON CAPTURE AND SEQUESTRATION (CCS)

CCS is a means of storing carbon dioxide underneath the Earth’s surface. *Id.* at 42. Essentially, carbon dioxide is captured from “coal-fired power plants” using one of several methods.² *Id.* (citations omitted). After capture, the carbon is transferred—most likely using pipes—to storage in a “subsurface formation.”³ *Id.* at 42–43. If CCS were adopted as a means to combat climate change, billions of tons of carbon dioxide would need to be stored. *Id.* at 41 (citing REPORT OF THE INTERAGENCY TASK FORCE ON CARBON CAPTURE AND STORAGE 38–39 (2010), available at <http://fossil.energy.gov/programs/sequestration/ccstf/CCSTaskForceReport2010.pdf>).

Storing such large amounts of carbon dioxide creates a risk for human and environmental health. *Id.* at 44. If carbon dioxide is released from the storage well, asphyxiation could result in fatalities, as occurred in 1986 when 1700 people died from the release of carbon dioxide from a natural reservoir in Cameroon. *Id.* at 45 (citing Donna M. Atanasio, *Surveying the Risks of Carbon Dioxide: Geological Sequestration and Storage Projects in the United States*, 39 ENVTL. L. REP. NEWS & ANALYSIS 10,376, 10,386 (2009)). CCS

1 Blowout preventers are means of preventing blowout by “clos[ing] valves and us[ing] shear rams to seal the drill pipe and well casing to block oil and gas from escaping.” John K. Borhardt, *Avoiding the Blowout*, MECHANICAL ENGINEERING, Aug. 2010, available at http://memagazine.asme.org/Articles/2010/August/Avoiding_Blowout.cfm.

2 These methods include: a “pre-combustion” method that employs an “integrated gasification combined cycle process”; a “post-combustion” method, which involves capturing the emissions and separating out carbon dioxide; and a process which “involves burning coal with pure oxygen.” Latham, *The BP Deepwater Horizon*, at 42 (citation omitted).

3 These subsurface formations can be either “depleted oil and gas formations”; coal seams; or “non-potable saline aquifers far below ground.” *Id.* at 43 (citations omitted).

can also contaminate groundwater, which is the most likely environmental and human health impact of CCS. *Id.* at 46.

CCS is subject to two federal statutes. First, CCS is subject to the Safe Drinking Water Act,⁴ which means that operators of CCS sites “must prepare an assessment of the geologic, hydrogeologic, geochemical, and geomechanical properties of proposed CCS sites.” *Id.* at 46–47 (citing 75 Fed. Reg. at 77,247). Essentially, CCS site operators must create models, develop safety plans, construct their carbon dioxide wells and injection measures under applicable guidelines, test and monitor their wells, and report the results of testing and monitoring to the Environmental Protection Agency. *Id.* at 47–48 (citations omitted). Second, CCS is regulated by the Clean Air Act.⁵ *Id.* at 48. Under the Clean Air Act, CCS operators must meet “record-keeping, reporting, and monitoring obligations.” *Id.* (citing 42 U.S.C. § 7414(a)(1) (2006)). The Department of Transportation also regulates the network of pipelines carrying the carbon dioxide. *Id.*

Latham argues that significant questions remain as to the efficacy of these regulations. The regulations do not address the remedial measures to be taken if, for example, a carbon dioxide well contaminates groundwater. *Id.* at 50. Furthermore, the impact of CCS is not fully understood and “global deployment of CCS will be, to some degree, an experiment.” *Id.*

B. HYDRAULIC FRACTURING

Hydraulic fracturing is a means of capturing natural gas from “formations that previously were unproductive.” *Id.* at 51 (citing IHS CAMBRIDGE ENERGY RESEARCH ASSOCS. FUELING NORTH AMERICA’S ENERGY FUTURE: THE UNCONVENTIONAL NATURAL GAS REVOLUTION AND THE CARBON AGENDA: EXECUTIVE SUMMARY 4 (2010)). Hydraulic fracturing, also called “hydrofracking,” involves using “water and chemical additives” to open fractures in shale formations, allowing natural gas to be released. *Id.* at 52 (quoting OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, HYDRAULIC FRACTURING RESEARCH STUDY 1 (2010)).

One environmental concern of hydraulic fracturing is that it uses large amounts of water, which may adversely affect surface and groundwater. *Id.* at 53. One well-known risk is “possible contamination of potable water sources.” *Id.* (citing Ian Urbina, *Regulation Lax as Gas Wells’ Tainted Water Hits Rivers*, N.Y. TIMES, Feb. 26, 2011, at A1). Although the legitimacy of this concern is debated, there have been “reported instances of groundwater contamination associated with hydraulic fracturing.”⁶ *Id.* at 53–54. For example, in 2010, the Pennsylvania Department of Environmental Protection advised residents that hydraulic fracturing had contaminated their drinking water. *Id.* at 54 (citing Mark D. Christiansen, *Legal Developments in 2010 Affecting the Oil and Gas Exploration and Production Industry*, 48 ROCKY MTN. MIN. L. FOUND. J. 177, 212–13 (2011)). As a result of the differing views on hydraulic fracturing’s impact on drinking water, the U.S. Environmental Protection Agency is researching its impact. *Id.* at 56 (citing OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, DRAFT PLAN TO STUDY THE POTENTIAL

4 42 U.S.C. §§ 300f–30j-26 (2006).

5 42 U.S.C. § 7401 et seq. (2006).

6 Groundwater contamination can occur through either the migration of the fracturing fluids or the release of methane from the formation into underground water supplies. *Id.* at 53–55 (citations omitted).

IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES vii (2011)). Soil and air quality can also be impacted by hydraulic fracturing. *Id.* at 57.

Latham argues that the “current federal regulatory approach is insufficient.” *Id.* at 58. For example, hydraulic fracturing is “expressly exempt” from the Safe Drinking Water Act. *Id.* Hydraulic fracturing is not understood fully, and only recently have policymakers planned “to undertake a study of the environmental consequences of hydraulic fracturing.” *Id.* at 59 (citing OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, DRAFT PLAN TO STUDY THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES vii (2011)). However, this “after-the-fact” and “limited” study is not “a comprehensive evaluation of the environmental impacts of hydraulic fracturing” because it will only examine the effect of hydraulic fracturing on drinking water and not a number of other potential negative environmental impacts. *Id.* Latham believes that this will not result in regulation that will sufficiently protect human and environmental health. *Id.*

C. GEOENGINEERING

Geoengineering is a general term that refers to “a variety of techniques . . . to cool the earth’s temperature as a way to mitigate . . . global warming.” *Id.* at 59–60 (citing STAFF OF H. COMM. ON SCI. & TECH., 111TH CONG., ENGINEERING THE CLIMATE RESEARCH NEEDS AND STRATEGIES FOR INT’L COORDINATION 1 (Comm. Print 2010)). There are two general categories of geoengineering: (1) increasing the reflectivity of the earth; and (2) removing carbon dioxide from the earth’s atmosphere (which would include CCS, discussed above). *Id.* at 60–61. Proposals for geoengineering include, *inter alia*, “seeding clouds” (adding salt to increase reflectivity of clouds), adding sulfur dioxide to the atmosphere, afforestation, and “ocean fertilization” (adding nutrients to the ocean to stimulate phytoplankton growth to sequester larger amounts of carbon dioxide) *Id.* at 61–62.

Many of the risks involved with geoengineering stem from a lack of knowledge about the proposed methods and their affects. *See id.* at 62–63 (quoting Michael C. MacCracken, World Bank, Beyond Mitigation: Potential Options for Counter-Balancing the Climatic and Environmental Consequences of the Rising Concentrations of Greenhouse Gases, Background Paper to the 2010 World Development Report 5–6 (2009)). Early research shows that some methods, such as seeding clouds or decreasing sunlight, could have adverse effects on weather patterns and water cycles. *Id.* at 63 (citations omitted). One major risk is what might happen if geoengineering “failed or malfunctioned,” as reversing or mitigating the effects might be difficult. *Id.* at 65. Finally, geoengineering could be used as a weapon for “intentionally harmful uses, such as inflicting a prolonged heat wave.” *Id.* at 67 (citing David G. Victor et al., *The Geoengineering Option: A Last Resort Against Global Warming?*, 88 FOREIGN AFF. 64, 72 (2009)).

There are currently no federal statutes dealing with geoengineering. *Id.* However, because the Soviet Union and United States were once researching the use of geoengineering, the United Nations did adopt a treaty in 1976—*The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*.⁷ *Id.* (citing Victor, *supra*, at 66–67). This treaty requires that no party to the treaty “engage in military or any other hostile use of environmental modification techniques hav-

7 31 U.S.T. 333 (Dec. 10, 1976).

ing widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.” *Id.* at 68 (quoting The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques [The Convention], Dec. 10, 1976, 31 U.S.T. 333, art. I). The convention does not preclude geoengineering use for “peaceful purposes.” *Id.* (quoting The Convention, art. III, § 1). Thus, the treaty does not prevent all uses or innovations of geoengineering. *Id.*

D. REGULATORY GUIDANCE

After reviewing these technologies and their potential risks, Latham questions: “How do we balance the need for technological innovation as a remedy for climate change and other environmental risks, while at the same time adequately regulating to protect human health and the environment without overly burdening technological innovation and creativity?” *Id.* at 69. Latham rejects an outright ban on these technologies because it does not balance the risks with the nation’s energy needs, but rather favors a “thoughtful regulatory approach.” *Id.* To achieve this, Latham suggests “regulatory principles for contemplation.” *Id.* at 70.

First, Latham argues that law makers should adhere to the “precautionary principle[,]” which is to “[a]void steps that will create a risk of harm.” *Id.* (quoting Cass R. Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003, 1003–04 (2003)). Latham argues that federal policymakers have ignored this principle, in favor of the “wait and see what happens” approach. *Id.* at 72. Latham further argues that international cooperation is essential to understand and mitigate the risks. *Id.* at 73. International governance should provide a “check on countries from acting in their best interests to the possible detriment of others.” *Id.* at 74.

Latham also argues that the “classic environmental regulatory approach” involving a “patchwork of state laws” needs reconsideration. *Id.* As the problems associated with these new technologies “cross state lines,” there is a need “for a unified regulatory approach that only the federal government can provide.” *Id.* at 76. This uniform approach will “prevent a race to the bottom” of states attempting to attract businesses with weak environmental regulations on new technology. *Id.* (citing Joshua D. Sarnoff, *The Continuing Imperative (But Only from a National Perspective) for Federal Environmental Protection*, 7 DUKE ENVTL. L. & POL’Y F. 225, 278 (1997)).

Finally, Latham calls for the reduction of dependency on fossil fuels. *Id.* at 78. In evaluating the risks and effects of new technologies, Latham argues that it is important to remember that “the need to wean ourselves off fossil fuels cannot be forgotten as we consider how best to regulate emerging technologies.” *Id.* at 78–79 (citing Alan Robock, *20 Reasons Why Geoengineering May Be a Bad Idea*, BULL. OF THE ATOMIC SCIENTIST, May/June 2008, at 17).

Joshua D. Katz is an attorney with Bickerstaff Heath Delgado Acosta LLP in Austin. Mr. Katz practices environmental law, administrative law, water law, and electric utility regulation and related litigation. He received his law degree from the University of Houston Law Center.

Grant Margeson is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

WASHINGTON UPDATE

FIRST FEDERAL RULE REGULATING AIR EMISSIONS PERTAINING TO HYDRAULICALLY-FRACTURED NATURAL GAS WELLS

In August 2012, the U.S. Environmental Protection Agency (EPA) issued a new air emissions limitation rule regulating the drilling of natural gas wells when the highly scrutinized process of hydraulic fracturing is used. 40 C.F.R. Parts 60 and 63 (2012). Hydraulic fracturing, or “fracking” as it is commonly known, is a method of natural resource extraction used by the oil and gas industry that involves creating fractures in rock formation to “stimulate the flow of natural gas or oil, increasing the volumes that can be recovered.” *The Process of Hydraulic Fracturing*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/hydraulicfracturing/process.html>. Hydraulic fracking in particular has allowed for better access to large quantities of natural gas located in shale formations within the United States. *Natural Gas Extraction*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/hydraulicfracture>.

Vast reserves of natural gas located within the United States are now available for extraction due to advances in hydraulic fracking technologies. *Id.* By 2035, the United States could very well be energy independent, according to the International Energy Agency. *North America Leads Shift in New Energy Balance*, INTL. ENERGY AGENCY (Nov. 15, 2012), <http://www.iea.org/newsroomandevents/pressreleases/2012/november/name,33015,en.html>.

While hydraulic fracking allows for large advances in the energy industry, it is not without its costs and critics. The Obama Administration has been reluctant to join the anti-fracking bandwagon, despite the Democratic Party’s traditionally green-leaning views. *Ohio’s Gas-Fracking Boom Seen Aiding Obama in Swing State*, BLOOMBERG NEWS (Nov. 15, 2012), <http://www.businessweek.com/news/2012-09-03/ohio-s-gas-fracking-boom-seen-aiding-obama-in-swing-state#p2>. A potential explanation is that despite possible environmental risk, fracking has provided not only a surge in oil and gas resources available from within the nation but also has provided desperately needed jobs in a struggling economy. *Id.*

According to studies conducted by EPA, in areas of natural gas development there have been measurable air-quality impacts of increases in emissions of methane, volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). 77 Fed. Reg. 49490 (Aug. 16, 2012). These potentially harmful impacts have been reported in communities located in the vicinity of natural gas fracking operations. *US Caps Emissions in Drilling For Fuel*, N.Y. TIMES (Nov. 15, 2012), <http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html>. While EPA recognizes the need for domestic natural gas development, it has nevertheless issued new regulations to protect air quality that are the “first federal air standards for natural gas wells that are hydraulically fractured.” 77 Fed. Reg. 49490; see also *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. EPA has issued air emissions standards that apply to hydraulic fracturing under authority granted by § 111(b) of the Clean Air Act (CAA). 77 Fed. Reg. 49496. The process of establishing emissions stan-

dards began when WildEarth Alliance filed suit against EPA under section 304(a)(2) of the Clean Air Act. *Id.* WildEarth “alleged that [] EPA failed to meet its obligations under CAA §§ 111(b)(1)(B), 112(d)(6) and 112(f)(2) to take actions relative to the review/revision of the NSPS [New Source Performance Standards] and the NESHAP [National Emission Standards for Hazardous Air Pollutants] with respect to the Oil and Natural Gas Production source category.” 77 Fed. Reg. 49496, *see also* *Wildearth Guardians v. Stephen L. Johnson, et al.*, Case 1:09-cv-00089-CKK (D. D.C., filed Jan. 14, 2009), Complaint for Declaratory Judgment and Injunctive Relief, available at <http://www.uschamber.com/sueandsettle/pleadings/Wildeath%20Guardians%20v.%20Jackson%20%28Oil%20and%20Gas%29/complaint.pdf>. The litigation resulted in the court issuing a consent decree compelling EPA to come up with proposed rules to regulate fracking emissions standards by July 2012 and further requiring EPA to issue the final rules no later than April 2012. *Wildearth Guardians v. Lisa P. Jackson, et al.*, Case 1:09-cv-00089-CKK (D. D.C., filed Jan. 14, 2009), Consent Decree, available at <http://www.uschamber.com/sueandsettle/pleadings/Wildeath%20Guardians%20v.%20Jackson%20%28Oil%20and%20Gas%29/ConsentDecreeEntered.pdf>.

EPA issued the regulations on April 17, 2012 with a comment period before the final rule was to be issued as required under the CAA. 77 Fed. Reg. 49490; *see also* *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. The final version of the regulations, released in August 2012, took into account concerns addressed during the period. *See* 77 Fed. Reg. 49490. The newly established rules, the New Source Performance Standards, apply to fracking for natural gas but do not apply to fracking at oil wells. *Id.* at 49492. The New Source Performance Standards are expected to accomplish the goal of reducing VOCs and methane from below ground wells that are released into the air during the extraction of natural gas by fracking. *US Caps Emissions in Drilling For Fuel*, N.Y. TIMES (Nov. 15, 2012), <http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html>. Toxic chemicals such as benzene, hexane, and methane released during the drilling of approximately 13,000 hydraulic fracking wells each year have caused health problems and environmental damage according to citizens and environmental groups. *Id.* EPA plans to reduce VOCs emitted each year by close to 95 percent, primarily through the use of the process of “green completion”, also known as “reduced emissions completion.” *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. Green completion will prevent the emitting of VOCs and other chemicals into the air by using equipment capable of capturing the natural gas that currently escapes containment during hydraulic fracking. *Id.* Green completion will, according to EPA, “reduce ground level ozone in areas where oil and gas production occurs.” *Id.* Methane emissions would also be reduced from new and modified wells. *Id.* Methane, part of the makeup of natural gas, is of particular concern due to its status as a greenhouse gas. *Id.*

The process of green completion involves bringing portable equipment to a fracking site. *Reduced Emissions Completions For Hydraulically Fractured Natural Gas Wells*, ENVTL. PROT. AGENCY (Nov. 15, 2012), http://www.epa.gov/gasstar/documents/reduced_emissions_completions.pdf. The equipment “separate[s] the gas from the solids and liquids produced during the high-rate flowback, and produce[s] gas that can be delivered into the sales pipeline.” *Id.* at 1. Effectively, the process captures valuable resources from

escaping while also preventing a substantial amount of pollution. See *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>.

EPA envisions the new regulations as a win-win for both industry and environmental regulators. According to EPA, the regulations are cost-effective for the energy industry because the market value of the natural gas captured during green completion should exceed the cost of compliance with the regulations. *Id.* EPA estimates that, when the rules are fully implemented, industry cost savings could reach \$11 million. 77 Fed. Reg. at 49492. In addition, a number of states and cities already require green completion, while some companies within the industry utilize it voluntarily. *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>.

CHALLENGES/LITIGATION

The final rules for New Source Performance Standards were issued in August 2012. 77 Fed. Reg. 49460. However, eight parties—including industry, state, and environmental agencies—filed challenges to the regulations by the October 15, 2012 deadline. *Independent Petroleum Association of America, et al. v. U.S. Env'tl. Protection Agency*, Cause No. 12-1408, Petition for Review (D.C. Cir., filed Oct. 15, 2012), available at <http://federal.eregulations.us/rulemaking/document/EPA-HQ-OAR-2010-0505-4581> (hereafter *Spilman Petition*); see also *Court Challenges to EPA's Oil and Gas Air Emissions Rules Filed*, THE STATE J. (Nov. 15, 2012), <http://www.statejournal.com/story/19926696/court-challenges-to-epas-oil-and-gas-air-emissions-rules-filed>. Among the challenging parties from within the oil and gas industry is a group representing small natural gas producers. See *Spilman Petition*. These producers argue that EPA's emission standards unfairly burden smaller operations. *Id.* The law firm of Spilman, Thomas, and Battle filed a petition for review on behalf of small natural gas producers, representing the Independent Petroleum Association of America, the Independent Oil and Gas Association of West Virginia, the Kentucky Oil & Gas Association, the Indiana Oil and Gas Association, the Pennsylvania Independent Oil & Gas Association, the Ohio Oil and Gas Association, and the Illinois Oil & Gas Association. A primary concern of these parties is that EPA chose a "one-size fits all" approach based on industry averages to support for its final rule. See *Spilman Petition*. These parties contend that, while green completion may be cost-effective for larger hydraulic fracking operations, it is not cost-effective for smaller operations. *Id.* Compliance may not be cost-effective for low-VOC natural gas wells. *Id.* Hydraulic fracking wells come in different varieties, despite EPA's assumptions during studies. *Id.* Some wells are "low-pressure, low-volume vertical wells and some are fractured using nitrogen or carbon dioxide rather than water—all of which makes the requirement for capturing or flaring emissions during flowback infeasible." *Id.* The *Spilman Petition* indicates a belief that EPA will make changes via supplemental rulemaking to not force small independent operators out of business. *Id.*

The American Petroleum Institute (API), representing more than 500 oil and natural gas companies, has also advocated for crucial reforms to the New Source Performance Standards issued by EPA. Like the *Spilman Petition*, API also takes issue with EPA's one-size-fits-all approach. *Howard Feldman Press Briefing*, AM. PETROLEUM INST. (Apr. 2012), <http://www.api.org/news-and-media/testimony-speeches/2012/howard-feldman-press-briefing-teleconference-on-epa-proposed-oil-gas-emission-rules.aspx>. API has

shown concern over the rules applying to operations in which very little of the regulated pollutants are being released during drilling. *Id.* A key concern is the assumptions made by EPA in assessing whether or not the regulations are actually cost-effective for industry. Gerard, *New Source Performance Standards for the Oil and Gas Sector* (Apr. 12, 2011), <http://www.api.org/news-and-media/news/newsitems/2012/apr-2012/~media/Files/News/2012/12-April/OGAdministratorLtr.ashx>. When proposing the rule, EPA assumed a fixed VOC gas content of 18%, which API argues is much higher than many of the small or temporary fracking operations contain. *Id.* API suggests that the regulations can only be cost-effective when the VOC content is 10% or higher. *Id.* Due to these concerns, API seeks to have the rules only apply to sources of significant VOCs, arguing that “a rule that applies without regard to VOC content is beyond EPA’s authority” under § 111 of the CAA. *Id.* (linking to comment letter).

API has also criticized EPA’s schedule for implementing the rules. *Howard Feldman Press Briefing*, AM. PETROLEUM INST. (Apr. 2012), <http://www.api.org/news-and-media/testimony-speeches/2012/howard-feldman-press-briefing-teleconference-on-epa-proposed-oil-gas-emission-rules.aspx>. According to API, green completion equipment is neither readily available nor easily manufactured on the scale EPA’s rule would require. *Id.* API estimates it would require between two to three years to manufacture the necessary amount of equipment and to train personnel to properly operate it. *Id.* Finally, API contends that compliance with the rule could be more easily achieved if the “system of notifications, monitoring, recordkeeping, performance testing and reporting requirements for compliance assurance were simplified.” *Id.*

Despite its concerns, API maintains that it is not against rules regulating emissions during hydraulic fracturing of natural gas wells. *Id.* Rather, API is of the viewpoint that the industry is already leading efforts to reduce environmental harm and lower greenhouse gas emissions. *Id.* API points out that the energy industry is in the business of capturing gases such as methane, which they can then market. *Id.* The viewpoint is that industry has no incentive to lose potential profits by letting the gas float into the atmosphere. *See id.* Also, API states that industry was responsible for designing the equipment that green completion would rely on. *Id.* EPA appears to be working with API on these regulations, as evidenced by the final rules issued after the comment period, which now will go into effect on January 1, 2015 rather than being effective immediately. 77 Fed. Reg. 49460, *see also EPA’s Final Rule Limiting Air Emissions From Fracking Operations*, FULBRIGHT & JAWORSKI (Nov. 15, 2012), <http://fulbrightfrackingblog.blogspot.com/search/label/NSPS>. Time will tell if even more of the rules will change.

Laura LaValle is an attorney who specializes in Clean Air Act matters at Beveridge and Diamond, P.C. in the Firm’s Austin, Texas office.

Darrin Wyatt is a third-year student at The University of Texas School of Law and a staff member of the Texas Environmental Law Journal.

SEVERANCE V. PATTERSON AND THE END OF OPEN BEACHES IN TEXAS

The six-year legal battle between the State of Texas and a California divorce attorney over private property rights in Galveston's West End Beach reached a finale last March in a 5-3 decision that sent a tidal wave through decades of jurisprudence regarding the Texas Open Beaches Act (OBA). *See Severance v. Patterson*, 370 S.W.3d 705 (Tex. 2012); *see also Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES (Texas Gen. Land Office, Austin, Tex.) Aug. 2012, at 1–2, *available at* <http://www.glo.texas.gov/GLO/publications/field-notes-august-2012.pdf>.

On March 30, 2012, after reconsideration on a motion for rehearing, the Texas Supreme Court affirmed its prior ruling in favor of beach-front property owners' rights to exclude the general public from privately-owned parcels now seaward of the vegetation line as a result of both gradual erosion and avulsive events, such as Hurricane Rita in 2006. *Severance*, 370 S.W.3d at 732. The decision represents a huge victory for Carol Severance and other private property owners and illustrates the court's commitment to preserving the landowner's right to exclude—generally recognized as one of the most fundamental “sticks” in the proverbial “bundle” of property rights. *Id.* at 709. At the same time, the decision brings to a close Texas' long-standing public policy of guaranteeing the public the free right of access to Texas beaches along the Gulf Coast, a tradition held dearly by Texas fisherman, surfers, vacationers and other Texans who grew up exploring on the public beach. The *Severance* decision has potentially far-reaching implications not only for those on Galveston's West End Beach, but also for the entire Texas coast. Further, it gives great power to anyone who challenges a public right of easement on beachfront property, effectively putting the public's use and enjoyment of Texas beaches in jeopardy. *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 2.

BACKGROUND AND PROCEDURAL HISTORY

Severance v. Patterson involved three parcels on Galveston Island's West Beach purchased in 2005 by Carol Severance, a California divorce attorney and real estate broker, who rented the properties to Texas families. *Severance*, 370 S.W.3d at 711; *see also Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 1. Although a public easement for use of the privately-owned parcel seaward of Severance's property preexisted the purchase, Severance's parcels were never subjected to any kind of easement. *Severance*, 370 S.W.3d at 711. Controversy arose in the aftermath of Hurricane Rita, which destroyed the adjacent property burdened by easement and moved the vegetation line landward. *Id.* at 712. As a result, Severance's properties became situated on the dry beach seaward of the vegetation line, raising the issue of whether the pre-existing easement “rolled” onto Severance's property along with the migrating line of vegetation. *Id.*

Pursuant to the OBA, the State sought to enforce a “rolling easement” on Severance's property on the ground that it interfered with the public's use of the dry beach. *Id.* Severance responded with a lawsuit, challenging the attempted enforcement on Fourth, Fifth, and Fourteenth Amendment grounds. *Id.* The Federal District Court for

the Southern District of Texas granted the State's motion to dismiss, "determining [that Severance's] arguments regarding the constitutionality of a rolling easement . . . were deficient on the merits." *Id.* On appeal, the United States Court of Appeals for the Fifth Circuit determined that Severance's takings claim was not ripe for review, "but certified unsettled questions of state law" to the Texas Supreme Court "to guide its determination on her Fourth Amendment unreasonable seizure claim." *Id.* The Texas Supreme Court rendered a decision in favor of Severance on November 5, 2010, but granted the State's request for rehearing on March 11, 2011. *Id.* Upon receiving the Texas Supreme Court's answers to certified questions on appeal, the Fifth Circuit reversed the district court's grant of the State's motion to dismiss predicated on Fed. R. Civ. P. 12(b)(1) and (6) and remanded for further proceedings regarding Severance's Fourth Amendment claim. *Severance v. Patterson*, 682 F.3d 360, 361 (5th Cir. 2012).

LEGAL BACKGROUND

It is long established under Texas law that all lands submerged by the Gulf of Mexico belong to the State to be "held in trust for the use and benefit of all the people." *Severance*, 379 S.W.3d at 715 (quoting *Lorino v. Crawford Packing Co.*, 175 S.W.2d 819, 820 (Tex. 1929)); see also TEX. NAT. RES. CODE § 11.012(c) (West 2011). Accordingly, all coastal property between mean low tide and mean high tide along the Coast constitutes the "wet beach" owned by the state, "regardless of whether the property immediately landward is privately or state owned." *Severance*, 379 S.W.3d at 714 (quoting Richard J. Elliott, *The Texas Open Beaches Act: Public Rights to Beach Access*, 28 BAYLOR L. REV. 383, 384 (1976)). In contrast, coastal property extending landward from the mean high tide to the line of vegetation comprises the "dry beach," which may be subject to private ownership. *Id.*

In 1959, the Texas Legislature enacted the OBA to establish "the State's policy for the public to have 'free and unrestricted access' to State-owned beaches, the wet beach, and the dry beach if the public had acquired an easement or other right to use that property." *Id.* at 718-19 (quoting TEX. NAT. RES. CODE § 61.011(a) (West 2011)). Pursuant to this goal, "the OBA prohibit[ed] anyone from creating, erecting, or constructing any 'obstruction, barrier, or restraint that [would] interfere with the free and unrestricted right of the public' to access" those areas of the beach on which public easement existed. *Id.* at 719 (quoting TEX. NAT. RES. CODE § 61.013(a) (West 2011)).

MAJORITY OPINION

On motion for rehearing, the court considered "the competing interests between the State's asserted right to a rolling public easement to use privately owned beachfront property . . . and the rights of the private property owner to exclude others from her property," finding that although "the public has an important interest in the enjoyment of the public beaches[,] . . . the right to exclude . . . is among the most valuable and fundamental of rights possessed by private property owners." *Id.* at 713. The central question for the court was "whether private beachfront properties on Galveston Island's West Beach are impressed with a right of public use under Texas law without proof of easement." *Id.* at 708. The court found that, under the OBA, the legislature recognized that the existence of a public right to an easement in the privately-owned dry beach area of West Beach is dependent on the government's establishing an easement in the dry beach or the public's right to use the beach 'by virtue of continuous right in the public

since time immemorial.” *Id.* at 714–15; *see also* TEX. NAT. RES. CODE § 61.001(8) (West 2011).

The court first inquired as to whether Texas common law recognizes such an inherent limitation on private property rights along Galveston’s West Beach. *Severance*, 379 S.W.3d at 715. The court found that, when private title was granted to individual owners in 1840, the government “release[d] and relinquishe[d] forever . . . all title to” the land to the private owners. *Id.* at 716. While the State “could have reserved the right of the public to use the beachfront property,” the court reasoned, “the plain language of the grant shows that [it] did not do so.” *Id.* at 717. Accordingly, the court reasoned, “there are no inherent limitations on title or continuous rights in the public since time immemorial that serve as a basis for engrafting public easements for the use of private West Beach property.” *Id.* at 733.

Finding no inherent limitations on *Severance*’s property rights, the court next considered the question of “whether principles of Texas property law provide for a rolling easement on the beaches along the Gulf Coast.” *Id.* at 714. The court noted that property along the Gulf Coast is “subjected to hurricanes and tropical storms, on top of the everyday natural forces of wind, rain and tidal ebbs and flows that affect the coastal properties and shift the vegetation line.” *Id.* at 723. In contrast to easements attached to static property boundaries, easements encumbering beachfront properties will necessarily change according to regular changes in the shoreline. *Id.* at 722. There is a key distinction affecting the magnitude of the flexibility of beachfront easements, however, between movement due to erosion and accretion, which are “gradual and imperceptible changes,” and avulsion, which results from “a rapid and perceptible change” in the shoreline. *Id.* Whereas a littoral landowner either acquires or loses land as a result of an easement moving with gradual and imperceptible changes in the shoreline due to erosion and accretion on the beach, sudden and perceptible changes do not allow for such changes in easement boundaries. *Id.* When a sudden event such as a hurricane or tropical storm moves the mean high tide line and vegetation line suddenly and perceptibly, causing a former dry beach to become part of the state-owned wet beach or completely submerged, the adjacent private property owner is not automatically deprived of her right to exclude the public from the new dry beach. *Id.* at 723–24. Rather, the court reasoned, “the State may seek to establish another easement as permitted by law on the newly created dry beach and assert public right to use the private land.” *Id.* at 724. Thus, the court held that “a public beachfront easement in West Beach, although dynamic, does not roll under Texas law.” *Id.* at 724. Accordingly, “if the public is to have an easement on a newly created and privately owned dry beach after an avulsive event, the State must prove it, as with other property.” *Id.* at 724.

DISSENTING OPINIONS

The majority opinion elicited three separate dissents. Justice Medina wrote first, characterizing the court’s holding as jeopardizing the public’s right to free and open beaches and disturbing the OBA’s reasoned balance between private property rights and the public’s free and unrestricted use of the beach. *Id.* at 733–34 (Medina, J., dissenting). While conceding that there was no *express* easement made in the original land grants to the property in question, Justice Medina argued that the court’s decision “ignores the implied easement arising from the public’s continued use of the beach for nearly 200 years.” *Id.* at 738. Further, Justice Medina criticized the court’s “illogical

[distinction] between shoreline movements by accretion and avulsion,” noting that Texas courts have repeatedly held that once an easement is established, it expands or contracts . . . despite the sudden shift of the vegetation line.” *Id.* at 737-38. As a result, Justice Medina contended, “every hurricane season will bring new burdens not only on the public’s ability to access Texas’s beaches but on the public treasury as well.” *Id.* at 739.

Justice Guzman wrote second, asserting that private property owners like Severance must forfeit some but not all of their property rights without just compensation. *Id.* at 744 (Guzman, J., dissenting). While Guzman agreed with Justice Medina’s contentions on Texas common law and the illogical distinction between accretion and avulsion, he wrote separately to assert that a coastal landowner whose property is burdened with an easement should not be required to remove his property or lose the right to use and maintain it. *Id.* at 744. Rather, a rolling easement which unreasonably burdens the servient estate so as to deprive the property owner of use and maintenance of her home would entitle the owner to compensation for a taking. *Id.* The majority dismissed this view as a severe limitation on the critical right to exclude, contemplating a scenario in which “a homeowner . . . could look out her window . . . as strangers play beach volleyball in her yard.” *Id.* at 730.

Justice Lehrmann wrote last, joining Justice Medina’s dissenting opinion but writing separately to emphasize additional points, most significantly the troubling practical implications of the Court’s decision. *Id.* at 754 (Lehrmann, J., dissenting). According to Justice Lehrmann, the decision “will contribute to the degradation of Texas’s beaches, ultimately to the detriment” of both littoral and non-littoral property owners. *Id.* at 754–55. The decision severely hampers the State’s ability to enforce the OBA’s restrictions on the placement of structures on the dry beach, which can “discourage the growth of vegetation that would . . . help protect landward areas from storm impacts and slow the rate of shoreline retreat.” *Id.* at 754. Further, because the Texas Constitution restricts and prohibits public expenditures for private purposes, the State and local governments will be prevented “from funding vital beach renourishment programs . . . [on] beaches from which the public is excluded.” *Id.* at 754–55. Justice Lehrmann also noted that the public’s diminishing right to public beach access will have detrimental effects on non-littoral property owners stemming from decreasing levels of tourism and declining values of homes whose owners “believed . . . included an interest in the dry beach as common property.” *Id.* at 755.

PRACTICAL IMPLICATIONS OF THE SEVERANCE DECISION

With one of the highest erosion rates in the United States, Texas loses five to ten feet of beach each year, causing previously unencumbered parcels to fall on the seaward side of the line of vegetation. *Open Beaches*, TEX. GEN. LAND. OFFICE, <http://www.glo.texas.gov/what-we-do/caring-for-the-coast/open-beaches/index.html> (last visited Jan. 20, 2013). As such, the implications of the *Severance* decision will be widely felt as miles of public beaches are gradually moving into unencumbered private parcels. While the decision is a huge victory for landowners wanting to exclude others from their property, the possible implications of the decision pose a great threat to Galveston and other coastal communities.

Opponents of the decision argue that “much-needed beach renourishment projects for Galveston Island’s rapidly eroding West End” will cease to exist because public

money cannot be used to benefit only a private landowner. *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 1-2. Further, the ruling makes it impossible for the state to act quickly to clear the beach of debris after a hurricane demolishes beachfront houses, efforts that amounted to expenditures of \$43 million by the General Land Office (GLO) on beach clean-up efforts after hurricanes Ike and Dolly. *Id.* Reports also indicate that the decision has led the GLO to cancel a \$40 million beach restoration project on western Galveston Island on the ground that the beaches eroded by Hurricane Ike in 2008 are now private. Christopher Smith Gonzalez, *Court: Public Beach Easement Does Not Roll*, THE GALVESTON COUNTY DAILY NEWS (Mar. 31, 2012), http://www.galvestondailynews.com/news/article_1199f272-aafc-50f7-bde5-ac3f993defe6.html. The decision also raises great concerns among other coastal communities, as it “gives a pretty big club to anyone who wants to challenge the Texas Open Beaches Act anywhere else along the coast.” *Supreme Court Kills Texas Tradition of Open Beaches on West Galveston*, FIELD NOTES at 2.

The *Severance* decision is not without supporters, however, as many view the decision as “a great victory for all Texas property owners” putting an end to “the rolling easement as we know it.” Christopher Smith Gonzalez, *Court: Public Beach Easement Does Not Roll*. Property owners like Carol Severance and others along the Texas coast are free to exclude unwanted strangers from their property and to build on their portions of the dry beach. *Fighting Government Seizure and Removal of Homes*, PACIFIC LEGAL FOUNDATION, <http://www.pacificlegal.org/cases/Fighting-government-seizure-and-removal-of-homes> (last visited Jan. 20, 2013).

Aileen Hooks is a partner at Baker Botts, L.L.P. The focus of her practice is environmental, health, and safety compliance and permitting, commercial real estate transactions, strategic relationships, and outsourcing.

Austin Whitmore is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

THE NINTH COURT OF APPEALS RULES ON REMAND IN *FPL FARMING v. ENVIRONMENTAL PROCESSING SYSTEMS*

On September 13, 2012, the Ninth Court of Appeals (Beaumont) in *FPL Farming Ltd. v. Environmental Processing Systems* provided clarification with regards to trespass law in Texas involving the injection and subsurface migration of wastewater. 383 S.W.3d 274 (Tex. App.–Beaumont 2012, pet. filed). Addressing specific issues following remand from the Supreme Court of Texas, the Beaumont court found that: (1) the burden of proving consent in trespass is placed on the alleged trespasser; (2) trespass is a viable cause of action for invasions of the briny water at the subsurface level even without damage at the surface level; and (3) that it is possible the jury could find trespass damages caused by an injection well. *Id.*

BACKGROUND

The controversy between FPL Farming Ltd. (FPL) and Environmental Processing Systems, L.C. (EPS) has been ongoing since 1996. *FPL Farming Ltd. v. Envntl. Processing Sys., L.C.*, 351 S.W.3d 306, 308 (Tex. 2011). In 1996, EPS applied for and received a permit for an injection well on land adjacent to FPL's land. *Id.* at 309.

In 2006, FPL filed suit for trespass seeking an injunction and damages. *Id.* After the jury found no trespass had occurred, FPL appealed to the Beaumont Court of Appeals. *Id.* The Beaumont Court of Appeals decided only whether FPL was able to “pursue a trespass claim when [] TCEQ approved an amended permit allowing EPS to inject the wastewater” and TCEQ was aware from the data provided that “EPS's waste plume was projected to migrate into the deep subsurface of the formation underlying FPL's property.” *Id.* The Court of Appeals affirmed the trial court's decision, deciding that a permit issued by a state agency shields the permittee from civil tort liability. *Id.* FPL then petitioned the Supreme Court of Texas and the petition for review was granted. *Id.*

On August 26, 2011, the Texas Supreme Court decided *FPL Farming Ltd. v. Environmental Processing Systems, L.C.*, 351 S.W.3d 306, 307 (Tex. 2011), reversing the Court of Appeals' finding that the TCEQ permit provided a shield from civil tort liability and remanding the case back to the Beaumont Court of Appeals to rule on the underground trespass issue. *Id.* at 308. In reaching its conclusion, the court noted that the Injection Well Act governing subsurface injection wells specifically provides that issuance of a permit “under this chapter does not relieve [a permittee] from any civil liability.” 351 S.W.3d at 312; TEX. WATER CODE § 27.104 (West 2008).

The court differentiated this case from those upon which the Beaumont Court of Appeals originally relied by clarifying that “the rule of capture is not applicable to wastewater injection.” 351 S.W.3d at 314. A landowner cannot necessarily drill a well and protect his interest by stopping wastewater from trespassing into his subsurface the way a mineral owner can drill a well to protect his interest from other mineral owners. *Id.* The court did not decide “whether subsurface water migration can constitute a trespass” and remanded the case to the Court of Appeals to determine the issues presented by FPL which the Court of Appeals originally did not answer. *Id.* at 315.

THE BEAUMONT COURT OF APPEALS DECISION ON REMAND

On remand, the Beaumont Court of Appeals reversed and remanded the case to the trial court for a new trial. *FPL Farming Ltd. v. Envtl. Processing Sys., L.C.*, 383 S.W.3d 274 (Tex. App. —Beaumont 2012, pet. filed).

One of the main issues originally presented by FPL was “whether the burden of proof was erroneously shifted to FPL in the jury charge.” 351 S.W.3d at 315. FPL contended that the trial court erred by giving a jury instruction that “erroneously placed the burden of proving lack of consent on it, rather than requiring EPS to prove FPL consented to EPS’s causing or permitting the waste plume to cross the boundaries of FPL’s property.” 383 S.W.3d at 282. Because the Texas Supreme Court has not decided a case to determine where the burden should be placed, the Court of Appeals first looked at several other court of appeals decisions that have placed the burden on the party that is alleged to have trespassed. *Id.* The court then considered principles of burden allocation such as the difficulty in proving a negative and the Restatement (Second) of Torts which states, “in trespass cases the burden of establishing the possessor’s consent is upon the person who relies upon it.” *Id.* at 284–85 (quoting the Restatement (Second) of Torts). The court held that “the charge improperly placed the burden of proving lack of consent on FPL and the trial court should have placed the burden on EPS.” *Id.* Because of this, the court also held that “because the charge required FPL to prove an element on which it did not bear the burden of proof, because that issue was hotly contested, and because EPS used the error to its advantage in final argument we hold the trial court’s error was harmful.” *Id.* at 285.

EPS raised another issue, claiming that trespass law in Texas does not extend to the subsurface depths where FPL alleges it was harmed at. *Id.* The Court of Appeals determined that Texas law does recognize a claim for trespass of subsurface briny water. *Id.* at 281-82. The court cited two Texas Supreme Court cases, *Gregg v. Delhi-Taylor Oil Corp.*, 344 S.W.2d 411 (Tex. 1961), and *Hastings Oil Co. v. Tex. Co.*, 234 S.W.2d 389 (Tex. 1950), where the court “by implication, recognized that the law of trespass applies to invasions occurring on adjacent property but at a level beneath the surface.” *Id.*

The Court of Appeals used both the Legislature and Texas Supreme Court decisions to determine that an owner of the surface has interests in the groundwater and subsurface briny water is treated the same as groundwater and therefore can be protected from invasions in trespass. *Id.* at 281. In *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012), the Texas Supreme Court recognized that those owners with an interest in the surface also have an interest in the water below the surface and may use the remedies provided by trespass when that interest in the water below the surface is violated. *Id.* at 842. While *Day* dealt with groundwater and not the briny water FPL claimed had been invaded, the Court of Appeals determined that the briny water is treated the same as groundwater using the Texas Supreme Court’s decision in *Robinson v. Robbins Petroleum Corp., Inc.*, 501 S.W.2d 865 (Tex. 1973), which stated “the owner of the surface also owns the saltwater in place beneath the surface.” *FPL Farming Ltd.*, 383 S.W.3d at 279-80.

EPS argued that its permit allows it to use the “storage potential of the unexploited space below FPL’s tract,” but the court rejected this argument in favor of protecting the “owner’s right to the exclusive use of its property.” *Id.* at 281. Some are concerned of the impact this could have on groundwater storage projects in Texas because the “language used by the court and the rationale would also likely apply to aquifer storage and recov-

ery projects.” Wes Strickland, *Arizona, Texas Courts Navigate Water Cases*, American Water Intelligence (October 2012), <http://www.americanwaterintel.com/archive/3/10/analysis/arizona-texas-courts-navigate-water-cases.html>.

The court was also asked to decide whether EPS’s waste plume did actual harm. *FPL Farming Ltd.*, 383 S.W.3d at 287. The court “decline[d] to hold that the trespass was *de minimis* in a case where a jury might find that EPS’s operations permanently damaged a natural resource, water, owned by FPL.” *Id.*

Because of the improper burden placement for consent, the court reversed the trial court’s judgment and remanded for a new trial. *Id.* These opinions could adversely affect permittees for injection wells under TWC Chapter 27. TCEQ states in all of its Underground Injection Control permits that the permit does not grant any property rights for the purpose of injecting substances underground. 30 TEX. ADMIN. CODE §§ 305.22(b) & (c) (2012) (Tex. Comm’n on Env’tl. Quality); *see also* TEX. WATER CODE § 27.104 (West 2008). Important future issues are whether EPS can show FPL consented to the injection and whether FPL can show damages, on remand.

Cross-petitions for review have been filed with the Texas Supreme Court and remain pending.

Ali Abazari is senior counsel in the regulatory and legislative section of Jackson Walker, L.L.P. Mr. Abazari specializes in solid waste, remediation, surface mining, and industrial waste water permitting and compliance counseling. He previously served as a regulatory specialist at URS Corporation and as an attorney in the Litigation Division of the Texas Commission on Environmental Quality.

Robin Smith is an attorney with the Texas Commission on Environmental Quality. Ms. Smith handles water rights, municipal solid waste, water quality and hazardous waste area matters. She has also worked with the Texas Water Commission, the Texas Supreme Court, and the Dallas Court of Appeals.

Kristin Garrett is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

PROPOSED RULES AFFECTING UTILITY REGULATIONS & WATER DISTRICTS

INTRODUCTION

On October 17, 2012, the Texas Commission on Environmental Quality (TCEQ) proposed rules affecting utility regulations and water districts. The new rules were adopted with minor changes in April 2012. 38 Tex. Reg. 2365-74. The rules concern a number of bills passed in 2011 by the 82nd Legislature amending the Texas Water Code. Specifically, TCEQ proposed adopting changes mandated by House Bill (H.B.) 679, H.B. 1901, Senate Bill (S.B.) 18, S.B. 512, S.B. 573, S.B. 914, and S.B. 1234. The new rules align the language in Chapters 291 and 293 of Title 30 of the Texas Administrative Code with the revised language of the Texas Water Code and the Local Government Code. See 37 Tex. Reg. at 8731, 8741 (codified at 30 TEX. ADMIN. CODE §§ 291 and 293). This comment details the substance rules' and their potential effect on the public and the regulated community.

AMENDMENTS TO CHAPTER 293 – WATER DISTRICTS

H.B. 679: TAC currently allows for an exemption from Commission approval when change orders are for \$25,000 or less. 30 TEX. ADMIN. CODE §§ 293.81(b) and (c) (2011) (Tex. Comm'n on Env'tl. Quality). H.B. 679 increased the exemption for change orders to \$50,000. This rule gives contract managers broader authority to approve change orders without seeking approval from the Commission. 37 Tex. Reg. at 8742 (codified at 30 TEX. ADMIN. CODE § 293.81(2) and (3)).

H.B. 1901: H.B. 1901 carved out an exemption from the TCEQ Executive Director's bond approval provisions, provided that the bonds issued by the public utility meet specified requirements. TEX. WATER CODE ANN. §§ 49.181 (a) and (h), 49.052(f), 49.183(d) (West 2011). The current framework for a water district's sale of bonds includes a number of exemptions. See 30 TEX. ADMIN. CODE § 293.41 (2011) (Tex. Comm'n on Env'tl Quality). The new rule further allows exemptions from TCEQ's approval of the issuance of bonds by a public utility agency if it is a municipal utility district (MUD) that includes territories in only two counties, has outstanding long-term indebtedness that is rated BBB or better by a nationally-recognized rating agency, and has at least 5,000 active water connections. 37 Tex. Reg. at 8751–52 (codified at 30 TEX. ADMIN. CODE § 293.41(a) and (d)). TCEQ anticipates that this amendment will affect water utilities by providing another opportunity for a bond exemption; however, it should not affect the general public. *Memorandum from L'Oreal W. Stepney, Deputy Director, Office of Water, to TCEQ Commissioners* (Sept. 28, 2012), available at http://www.tceq.texas.gov/assets/public/legal/rules/rule_lib/proposals/11055293_pex.pdf.

S.B. 18: TCEQ rules enumerate limitations on the use of eminent domain by MUDs. 30 TEX. ADMIN. CODE § 293.51(2011) (Tex. Comm'n on Env'tl Quality). Consistent with S.B. 18, the new rules further limit a MUD's power of eminent domain outside of its district boundaries. See TEX. WATER CODE ANN. § 54.209(e) (West 2011). Notably, the new regulations further restrict eminent domain power for sites or ease-

ments for road projects. 37 Tex. Reg. at 8753–54 (codified at 30 TEX. ADMIN. CODE § 293.51(e)(2) – (4), (g)). These additional limitations on MUDs' authority to use eminent domain could affect utility districts and the general public. And while this relates to real property rights, TCEQ does not anticipate the regulations generating takings claims because this provision limits the district's power of using eminent domain. *Id.* at 8743.

S.B. 512: The existing regulations require that a director of a fresh water supply district (FWSD) must be: (1) a registered voter of the district; (2) the owner of taxable property in the district; and (3) at least 18 years of age; or, if the director is seeking election in a district located partly in Denton County, that person must be a registered voter of the district but need not own taxable land in that district. 30 TEX. ADMIN. CODE § 293.32 (2011) (Tex. Comm'n on Envtl Quality). Consistent with S.B. 512, the new rules allow a supervisor to be qualified if the person was a registered voter of the district. 37 Tex. Reg. at 8750 (codified at 30 TEX. ADMIN. CODE § 293.32(a)(1)(B)). This amendment changes the election qualification in a way that was previously only available in Denton County.

S.B. 914: S.B. 914 concerns issuance of bonds; and, similar to H.B. 1901, TCEQ's new rules also amended 30 TAC § 293.41 to add an exemption from Executive Director approval for bonds. The new rules make 30 TEX. ADMIN. CODE § 293.41 consistent with TEX. WATER CODE § 49.181 by offering conservation and reclamation districts an exemption if they are located in at least three counties that have the rights, powers, privileges, and functions applicable to a river authority. 37 Tex. Reg. at 8751–52 (codified at 30 TEX. ADMIN. CODE § 293.41(a) and (d)). By offering an exemption, the new rules have the potential to affect utilities districts, but should not have a bearing on the general public nor on property rights. See *Memorandum from L'Oreal W. Stepney* at 4.

S.B. 1234: Under prior TCEQ rules, to create a municipal management district (MMD), the petition had to describe the proposed district's boundaries by: (1) metes and bounds, or (2) lot and block number if there was a recorded map or plat and survey. 30 TEX. ADMIN. CODE § 293.11(j)(1)(a) (2011) (Tex. Comm'n on Envtl. Quality). Adoption of the new rule allows the MMD boundaries to be described using verifiable landmarks in its boundary description. 37 Tex. Reg. at 8750. Thus, this gives greater flexibility in creating MMDs.

AMENDMENTS TO CHAPTER 291 – UTILITY REGULATIONS

S.B. 573: Adoption of S.B. 573 resulted in significant amendments to the existing law regarding certificates of public convenience and necessity (CCNs). 37 Tex. Reg. at 8731; 38 Tex. Reg. 2365. Approval of the new rules made a number of changes to the issuance and regulation of CCNs by amending 30 TAC §§ 291.22, 291.102, 291.105, and 291.113. 37 Tex. Reg. at 8731; 38 Tex. Reg. 2365.

The administrative requirements regarding notice to change rates were amended to further require the utility to: (1) disclose any ongoing proceeding to revoke or amend a CCN under 30 TEX. ADMIN. CODE § 291.113; (2) give the reason(s) for the proposed rate change; and (3) give notice of any bill payment assistance program available to low-income ratepayers. See 38 Tex. Reg. at 2366, 2369(codified at 30 TEX. ADMIN. CODE §§ 291.22).

Previous TCEQ regulations allowed landowners meeting certain specifications to elect to exclude part or all of their property from a proposed CCN. 30 TEX. ADMIN.

CODE § 291.102(h) (2011) (Tex. Comm'n on Envtl. Quality). Consistent with S.B. 573, the new rules ensure that a CCN holder is not required to provide service to any landowner that has opted out of the CCN. See 37 Tex. Reg. at 8736 (codified at 30 TEX. ADMIN. CODE § 291.102).

The new rules also amended 30 TEX. ADMIN. CODE § 291.105(b)(4) and now allow TCEQ to grant a retail public utility a CCN without consent of a municipality for service areas within the boundaries or the extraterritorial jurisdiction (ETJ) of the municipality if: (1) the municipality has not consented before the 180th day after a landowner or retail public utility has requested a CCN; (2) the municipality has not consented before the 180th day after a public utility requested a CCN and TCEQ finds that the municipality does not have the ability to provide service or has not made a good faith effort to provide service; (3) the municipality has not entered into a binding agreement to serve the area that is the subject of the application before the 180th day after a formal request was made; (4) a landowner or public utility submitted a formal request and did not unreasonably refuse to comply with the municipality or enter into a contract for water or sewer services; or (5) the municipality refused to provide service in the area. 37 Tex. Reg. at 8738 (codified at 30 TEX. ADMIN. CODE § 291.105 (b)(4 - 5)).

Further, these amendments amend 30 TEX. ADMIN. CODE § 291.105(b)(6) to provide that, should TCEQ grant a CCN, it must be conditioned with the requirement that all water and sewer facilities be designed and constructed in accordance with a municipality's standards. 37 Tex. Reg. at 8738-39 (codified at 30 TEX. ADMIN. CODE § 291.105(c)(1) and (c)(2)). The new regulations amend 30 TEX. ADMIN. CODE § 291.105(c)(1) to specify that TCEQ may not extend a CCN beyond a municipality's ETJ if a landowner wholly or partly outside the ETJ elects to exclude all or part of his land within the proposed service area—unless the proposal concerns the transfer of a certificate approved by TCEQ. 37 Tex. Reg. at 8738–39.

The regulations alter the current framework for TCEQ's revocation of a CCN. The new rules amended 30 TEX. ADMIN. CODE § 291.113(b) to provide that a certificate holder's status as a borrower under a federal loan program does not bar a request to release land and receive services from a different provider. 38 Tex. Reg. at 2370. The new rules also amended 30 TEX. ADMIN. CODE § 291.112(a) to add two additional criteria to be proved by petitioners requesting their land be removed from a CCN, such that a petitioner must: (1) file a written request for service to the certificate holders approximating the cost for an alternative provider; and (2) specify the flow and pressure requirements and infrastructure line size and system capacity for the required level of fire protection. 37 Tex. Reg. at 8732. TCEQ also amended 30 TEX. ADMIN. CODE § 291.113(b)(3)(B) to require TCEQ to consider the alternative provider's capability of providing the same level of service. 38 Tex. Reg. 2370. TCEQ shortened the review period for granting/denying petitions from 90 to 60 days, by amending 30 TEX. ADMIN. CODE § 291.113(d). This also added a provision to 30 TEX. ADMIN. CODE § 291.113(r) allowing a petition for expedited release of properties from CCNs if the land in question meets the specified requirements and is within certain counties. 38 Tex. Reg. 2371. The amendments also provide additional requirements for those filing a petition for expedited release of CCNs. *Id.*

TCEQ analyzed the potential for the amendments from S.B. 573 to affect government costs, takings issues, and coastal management programs. 37 Tex. Reg. at 8734. However, TCEQ concluded that the amendments would not have any significant effects

on government costs, would not give rise to takings claims, and would not affect any coastal management programs. *Id.* TCEQ identified a potential impact on retail utilities when CCN exemptions are requested, but confined that issue to counties lacking water or sewer services. *Id.* Finally, while S.B. 573 created a new class of affected persons, the new rule changes establish a procedure for requesting an expedited release from current CCNs. *Id.* at 8733.

Emily Rogers is a partner practicing environmental law and water and wastewater utility law at Bickerstaff, Heath, Pollan & Caroom, L.L.P. in Austin. Ms. Rogers is a graduate of the University of Houston Law Center and formerly served as an attorney for the Texas Natural Resource Conservation Commission.

Merrill Jones is a third-year student at The University of Texas School of Law and a staff member of the Texas Environmental Law Journal.

WYNNE V. KLEIN, NO. 03–11–00574–CV, 2012 WL 5392142, *2
(TEX. APP.—AUSTIN OCT. 31, 2012, PET. DENIED FEB. 8, 2013)

In a case that could potentially affect the operations of the Lower Colorado River Authority (LCRA) and Texans from the central region to the Gulf, the Texas Court of Appeals in Austin dismissed a suit that attempted to hold LCRA liable for substantially draining Lake Travis during the recent drought that has plagued much of Texas. *Wynne v. Klein*, No. 03–11–00574–CV, 2012 WL 5392142, *2 (Tex. App.—Austin Oct. 31, 2012, pet. denied Feb. 8, 2013).

In what has been said to be one of the worst droughts in Texas history, the State has been facing the major issue of water conservation. See, e.g., *Texas Drought*, LCRA, <http://www.lcra.org/water/drought/index.html> (last updated Feb. 15, 2013). 2011 was the driest year ever in Texas. *Everything You Need to Know About the Texas Drought*, STATE IMPACT (NPR), <http://stateimpact.npr.org/texas/tag/drought> (last visited Jan. 19, 2013). Lakes Travis and Buchanan, the region's water supply reservoirs, depend on rain to feed the rivers, creeks and other tributaries that fill them. *Texas Drought*, LCRA, <http://www.lcra.org/water/drought/index.html> (last updated Feb. 15, 2013). Because of the prolonged drought, the amount of water flowing into the lakes (inflows) has been historically low. *Id.* Inflows in 2011 were the lowest in history, at about 10 percent of average, and inflows in 2012 were the fifth lowest in history, at about 32 percent of average. *Id.* Although there was some relief in 2012, there is no definitive end to the drought in sight. *Everything You Need to Know About the Texas Drought*, STATE IMPACT (NPR), <http://stateimpact.npr.org/texas/tag/drought> (last visited Jan. 19, 2013). Due to the lake levels, LCRA obtained emergency relief from the Texas Commission on Environmental Quality to limit the water releases from the lakes for downstream irrigation. Becky Motal, *Stubborn Drought, Dry Forecast Drives Emergency Request*, LCRA (Jan. 14, 2013), http://www.lcra.org/newsstory/2013/drought_dry_forecast_drives_emergency_request.html.

LCRA is a conservation and reclamation district created by the Texas Legislature in 1934. TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.001 (West 2012); *The ABCs of LCRA*, LCRA, <http://www.lcra.org/about/overview/index.html> (last updated Jan. 25, 2013). It is a nonprofit public utility that manages the water along the Highland Lakes and lower Colorado River in Central Texas all the way to Matagorda Bay. *The ABCs of LCRA*. Its authority is granted under the Texas Constitution Article XVI, § 59(a), which provides:

The conservation and development of all of the natural resources of this State, and development of parks and recreational facilities, including the control, storing, preservation and distribution of its storm and flood waters, the waters of its rivers and streams, for irrigation, power and all other useful purposes, the reclamation and irrigation of its arid, semiarid and other lands needing irrigation, the reclamation and drainage of its overflowed lands, and other lands needing drainage, the conservation and development of its forests, water and hydro-electric power, the navigation of its inland and coastal waters, and the preservation and conservation of all such natural resources of the State are each and all hereby

declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.

Tex. Const. art. XVI, § 59(a).

Appellant Robert L. Wynne, D.D.S., a lakeside resident, sued the members of the board of directors of the LCRA (the Board) in their official capacities, seeking to hold them liable for causing low water levels in Lake Travis through alleged unconstitutional acts during 2008 and for most of 2009 through 2011. *Wynne*, 2012 WL 5392142, at *2.

Wynne contended the following activities were beyond the scope of the Board's constitutional authority:

- (1) Owning or operating gas or coal-fired electrical generating plants which “demands and consumes water from Lake Travis”;
- (2) Selling water to the South Texas Nuclear Project;
- (3) Selling water downstream of Lake Travis for non-irrigation purposes; and
- (4) Permitting too much water from the Colorado River to flow into Matagorda Bay and its estuaries.

Id.

The Board filed a plea to the jurisdiction, asserting that sovereign immunity barred the suit because LCRA is a governmental agency and political division of the State and is immune from such suits unless the legislature has expressly waived it or when government officers act “without legal authority or failed to perform a purely ministerial act.” *Id.* at *1. It also contended that Wynne lacked standing to bring suit. *Id.*

On October 31, 2012, the Austin Court of Appeals affirmed the trial court's dismissal of the suit, which Wynne argued allows LCRA limitless authority over the uses of the Colorado River's water. *Id.* The court held that none of the complaints in Wynne's petition constituted an ultra vires act and therefore the Board's sovereign immunity barred Wynne's suit. *Id.* at *4.

Wynne's first complaint was based on his interpretation of the word “power,” which he argued referred exclusively to hydroelectric power, not the gas or coal-fired electric plants LCRA currently operates. *Id.* at *2. The court, however, held that a plain reading of the provision allows LCRA to use the water for the generation of any power or any “useful purpose.” *Id.* at *2. The court applied the same logic to Wynne's second contention, that LCRA cannot sell water to a nuclear power plant. *Id.* at *3. LCRA's enabling act permits it to “develop and generate water power and electric energy.” TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.004(d). In 1975, LCRA's enabling act was amended to allow the authority to develop all types of energy, not just hydropower. See *Id.* § 8503.013(c).

Wynne also argued that LCRA is not authorized to sell water for any revenue-generating purposes, which leads into his third complaint. *Wynne*, 2012 WL 5392142, at *3. In Wynne's petition to the Supreme Court of Texas, he argued that the generation of revenues is outside LCRA's constitutional scope and that LCRA should operate by levying taxes. Brief for Petitioner at 8, *Wynne v. Klein*, 2012 WL 5392142 (2012) (No. 12-0985). The appeals court found that merely generating revenue does not render acts as beyond the scope of permitted activities. *Wynne*, 2012 WL 5392142, at *3. Article XVI, § 59(c) of the Texas Constitution allows the Legislature to empower a conservation and reclamation district to levy taxes, but LCRA has never been granted such authority. TEX. CONST. art. XVI, § 59(c). In fact, LCRA is statutorily-prohibited from imposing a tax. See TEX. SPEC. DIST. LOCAL LAWS CODE ANN. § 8503.001(c).

Wynne's fourth complaint, that LCRA has wasted water by allowing too much to flow into the Matagorda Bay, targets the discretion the Board has in addressing water needs for the river and estuarine systems. *Wynne*, 2012 WL 5392142, at *3. Wynne contended that by exceeding minimum "target inflow needs" of Matagorda Bay, water was being wasted. *Id.* Rejecting this contention, the court gave deference to the Board's discretion and found no prohibition on exceeding minimum water flow requirements. *Id.* at *4.

Having found that none of Wynne's four complaints constituted ultra vires acts, the court held that Wynne's claims were barred by sovereign immunity. *Id.* Because the claims were otherwise barred, the court had no need to address Wynne's standing to bring the claim. *Id.*

Stephanie Trinh will be a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

NAVIGABILITY OF THE COLORADO RIVER LAKES

In a recent case, Michael L. MacGowan filed a pro se suit in federal court claiming admiralty jurisdiction based on his alleged rescue of an unmanned jet ski on Lake Lyndon B. Johnson (Lake LBJ). *MacGowan v. Cox*, No. 11-50415, 2012 WL 3892645, at *1 (5th Cir. Sept. 7, 2012) (per curiam). MacGowan sought half the value of the vessel as a salvage fee. *Id.* The district court found that Lake LBJ was landlocked, bounded by impassable dams, and located entirely within a single state. *Id.* Thus, the court dismissed the case for lack of subject matter jurisdiction, holding that Lake LBJ was not a navigable waterway for the purpose of admiralty jurisdiction. *Id.* In a brief opinion, the Fifth Circuit Court of Appeals affirmed the district court's decision on the same reasoning, citing a prior opinion in which the court stated that a body of water contained in Louisiana and blocked by dams was not navigable for admiralty jurisdiction purposes because interstate travel via the waterway was not possible. *Id.*

NAVIGABLE WATERS

When examining judicial precedent concerning “navigable waters,” it is important to consider the purpose for which the concept was invoked in a given case. *Kaiser Aetna v. United States*, 444 U.S. 164, 171 (1979). As recently as this year, the U. S. Supreme Court identified several distinct concepts that the term “navigable waters” is used to define: 1) to determine state title under the equal-footing doctrine; 2) to define the scope of Congress’ regulatory authority under the Commerce Clause; 3) to determine the extent of the U.S. Army Corps of Engineers’ (Corps) authority under the Rivers and Harbors Appropriation Act of 1899; and 4) to establish the limits of federal court admiralty and maritime jurisdiction. *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215, 1228 (2012); *Kaiser*, 444 U.S. at 171–72. As a result, the analysis of navigability is largely dependent upon the circumstances of each case.

Under these concepts, there are starkly differing standards for branding waters as “navigable.” For instance, navigability is determined at the time of statehood and based on the “natural and ordinary condition” of the water for purposes of the equal-footing doctrine. *Montana*, 132 S. Ct. at 1228 (quoting *Oklahoma v. Texas*, 258 U.S. 574, 591 (1922)). By contrast, when analyzing the scope of Congress’ Commerce Power, it is important to consider waters that “were once navigable but are no longer,” as well as waters that “are not navigable and never have been but may become so by reasonable improvements.” *Montana*, 132 S. Ct. at 1228 (citing *Econ. Light & Power Co. v. United States*, 256 U.S. 113, 123–124 (1921) and *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407–08 (1940)). The authority of the Corps restricted navigable waters defined to include “relatively permanent, standing or continuously flowing bodies of water.” *Rapanos v. United States*, 547 U.S. 715, 739 (2006).

In establishing the limits of admiralty jurisdiction, the Supreme Court has greatly limited the definition of navigable waters. The Court has established a two-pronged test to determine whether admiralty jurisdiction applies:

[A] party seeking to invoke federal admiralty jurisdiction pursuant to 28 U.S.C. § 1333(1) over a tort claim must satisfy conditions both of location and of con-

nection with maritime activity. A court applying the location test must determine whether the tort occurred on navigable water or whether injury suffered on land was caused by a vessel on navigable water.

Jerome B. Grubart, Inc. v. Great Lakes Dredge & Dock Co., 513 U.S. 527, 534 (1995). Thus, to establish admiralty jurisdiction, a court must determine that both the location and connection tests have been fulfilled.

Waters meet the location prong of the admiralty jurisdiction test “when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water.” *The Daniel Ball*, 77 U.S. 557, 563 (1870). Four years later, the Court elaborated on its test, stating that a body of water may still be navigable “although its navigation may be encompassed with difficulties by reason of natural barriers, such as rapids and sand-bars.” *The Montello*, 87 U.S. 430, 443 (1874). The Fifth Circuit Court of Appeals has added that “distinctions between natural and man-made bodies of water are immaterial.” *Sanders v. Placid Oil Co.*, 861 F.2d 1374, 1377 (5th Cir. 1988). The Fifth Circuit has further explained that admiralty jurisdiction should be “as readily ascertainable as courts can make it.” *Richardson v. Foremost Ins. Co.*, 641 F.2d 314, 316 (5th Cir. 1981), *aff’d*, 457 U.S. 668 (1982). Accordingly, while a waterway must be capable of being used in interstate or foreign commerce, it does not have to currently be used for commercial activity to satisfy the connection test. *Id.* To satisfy the connection test, a court must determine if the “general features of the type of incident involved . . . has a potentially disruptive impact on maritime commerce” and “whether the character of the activity giving rise to the incident shows a substantial relationship to maritime activity.” *Jerome B. Grubart, Inc. v. Great Lakes Dredge & Dock Co.*, 513 U.S. 527 (1995) (quoting *Sisson v. Ruby*, 497 U.S. 358, 362 (1990)).

LAKE LBJ

In *MacGowan*, the court applied the location prong of the admiralty jurisdiction test to Lake LBJ. No. 11-50415, 2012 WL 3892645, at *1 (5th Cir. Sept. 7, 2012) (per curiam). Lake LBJ is located on the Colorado River, the source of which is situated in Dawson County, Texas in far west Texas and mouth of which empties into the Gulf of Mexico at Matagorda County, Texas. The Colorado River and Lake LBJ are located entirely within the state of Texas and are therefore unable to carry commerce directly to any other state. Consequently, for Lake LBJ to be considered navigable, commerce must be capable of traveling from the lake, down the Colorado River, and into the Gulf of Mexico. As stated by the court in *MacGowan*, however, Lake LBJ is bounded by impassable dams. *Id.* Though courts have stated that natural barriers only making travel more burdensome may not prevent a waterway from being navigable, these structures make it impossible for any vessel to reach the Gulf of Mexico through Lake LBJ. Therefore, Lake LBJ is incapable of supporting interstate or foreign commerce and fails the location prong of the admiralty jurisdiction test. The *MacGowan* court did not provide any analysis of the connection prong, as failure of the location prong was sufficient to render admiralty jurisdiction inappropriate.

IMPACT

While short and unpublished, the *MacGowan* opinion provides potentially important analysis. The opinion provides a forecast of how the court is likely to apply the location prong of the admiralty jurisdiction test to similarly-situated lakes.

David J. Klein is a member of the Lloyd Gosselink Rochelle & Townsend, P.C.'s Water and Districts Practice Groups in Austin, where he focuses on representing water utilities, municipalities, water districts, water authorities and landowners with their water supply, water quality, and water and sewer utility service interests. Mr. Klein earned his J.D. from The John Marshall Law School in Chicago, Illinois.

Erik Combs is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

HOUSTON AUTO M. IMP. N., LTD. v. R & A HARRIS S., L.P., 2012 WL 3628878 (TEX. APP.—HOUSTON [1ST DIST.] AUG. 23, 2012, NO PET. H.)

On August 23, 2012, Houston's First District Court of Appeals affirmed a district court judgment awarding declaratory relief and damages to R & A Harris South, L.P., (R & A Harris) for a breach of contract claim related to soil and groundwater contamination from underground storage tanks. *Houston Auto M. Imp. N., Ltd. v. R & A Harris S., L.P.*, 2012 WL 3628878, *1 (Tex. App.—Houston [1st Dist.] Aug. 23, 2012, no pet. h.). On appeal, the defendant, Houston Auto M. Imports North, Ltd. (Houston Auto), asserted that: (1) the evidence was legally and factually insufficient to support the damages awarded; (2) the terms of the contract at issue had been misconstrued; (3) the relief granted was beyond that provided for under the Uniform Declaratory Judgments Act (UDJA); and (4) the affirmative defenses of limitations and laches were denied in error. *Id.*

In February 2002, Houston Auto and R & A Harris entered into a contract for the sale of real property owned by Houston Auto. *Id.* Before closing, the parties discovered that a previously-removed underground storage tank (UST 3) had leaked chlorinated solvents that contaminated the soil and groundwater. *Id.* In June 2002, the parties amended their original Purchase and Sale Agreement and delayed the closing. *Id.*

The parties executed a Second Amendment to Agreement of Purchase of Sale (Second Amendment) that allocated responsibility for the contamination in June 2002. *Id.* Section 2 of that agreement provided that Houston Auto, "at its sole cost and expense, shall immediately commence and diligently pursue to completion in good faith all action necessary to remediate . . . the soil and groundwater contamination associated with the release of chlorinated solvents" found on the property. It further required Houston Auto to "remediate as necessary . . . all contamination which may arise from the potential offsite migration, if any, of the groundwater and soil contamination." *Id.*

The parties' Second Amendment also included a broad indemnification clause that required Houston Auto to indemnify R & A Harris "against any claims, demands, liability, loss, damages, fines, costs or expenses [R & A Harris] may incur or which may be asserted against [R & A Harris] as a result of or arising out of the foregoing soil and groundwater contamination . . . including without limitation, reasonable attorneys' fees and related costs and expenses paid or incurred by [R & A Harris]." *Id.* at *2. In August 2002, the parties also entered into a Mutual Environmental Indemnity Agreement providing that Houston Auto would indemnify R & A Harris against "any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, judgments, costs, expenses and disbursements" arising from the removal of hazardous waste on the property. *Id.*

With the foregoing agreements in place, the parties closed the sale of the property on August 23, 2002. The parties then entered into the Voluntary Cleanup Program (VCP) of the Texas Commission on Environmental Quality (TCEQ). Pursuant to the VCP, in February 2004, TCEQ approved Houston Auto's Response Action Plan that proposed remediation of contamination through a process of monitored natural attenuation, including quarterly tests of groundwater at a number of monitoring wells. *Id.*

Initial sampling by R & A Harris in 2004 and 2005 indicated that groundwater was contaminated beyond acceptable levels at Monitoring Well 1 (MW-1), located at the former location of UST 3, as well as at Monitoring Well 3 (MW-3) located down-gradient. *Id.* at *3. By November 2004, contamination levels at Monitoring Well 7 (MW-7), located further downgradient from MW-3, just met the accepted limits. *Id.* Although Houston Auto failed to collect additional samples as scheduled, the samples it did collect demonstrated the increasing spread of contamination. *Id.*

Throughout 2006, R & A Harris's environmental consultant expressed concern that the contamination was spreading and required immediate active remediation. *Id.* By mid-2007, Houston Auto implemented active remediation through chemical injection into the groundwater. *Id.* at *4. Concerned about the continued spread of contamination, and after failing to persuade Houston Auto to do so, R & A Harris installed additional monitoring wells at its own expense. *Id.* In response to continued delay and inaction by Houston Auto, in 2009 R & A Harris independently prepared and submitted an active remediation plan to TCEQ. *Id.* at *5. That plan was ultimately withdrawn upon Houston Auto's eventual submission and implementation of a comparable plan. *Id.*

R & A Harris sought damages and reasonable attorneys' fees stemming from Houston Auto's alleged breach of contract for failure to "immediately commence and diligently pursue to completion all action necessary to remediate" the contamination and not "obtain[ing] regulatory approval or closure of the remediation within a reasonable time after closing of the purchase." *Id.* at *5. The district court found that R & A Harris had provided notice of its dissatisfaction to Houston Auto. *Id.* at *6. The court further found that Houston Auto had "not exercised diligence by taking all action necessary." *Id.* The court awarded \$116,975.44 for R & A Harris's expenses resulting from Houston Auto's failure to fulfill its contractual obligations. *Id.* The court further declared that, under the parties' agreements, Houston Auto would be liable for similar future costs. *Id.*

On appeal, Houston Auto challenged the district court's construction of the parties' agreements and the sufficiency of the evidence of a breach. *Id.* at *7. The Court of Appeals overruled both issues. It held that the contract required more than compliance with TCEQ standards; namely, immediate and diligent remediation efforts. *Id.* at *8. The Court of Appeals further held that the district court could have reasonably found a failure to diligently pursue remediation based on Houston Auto's awareness of migration, inconsistent monitoring efforts, and pattern of late reporting, in combination with the increasing spread of contamination over eight years. *Id.* at *10.

Houston Auto further challenged the award and amount of damages. It asserted that damages should not have been awarded under either the indemnity provision of the Second Amendment or the Mutual Environmental Indemnity Agreement. *Id.* at *11. Strictly construing the agreements, the Court of Appeals rejected Houston Auto's argument that it was not required to compensate R & A Harris for "voluntary" or independently incurred expenses. *Id.* at *12. Rather, the Court of Appeals concluded that the agreements required indemnification for any costs with a causal connection to the relevant soil and groundwater contamination. *Id.*

Finally, Houston Auto challenged the declaration by the trial court that Houston Auto would be liable for further expenses relating to remediation under the indemnification clauses, asserting that it amounted to an advisory opinion. The Court of Appeals affirmed the holding below, finding that the declaration merely "declared the rights of

the parties under the Second Amendment as authorized by [the UDJA],” and therefore was not an advisory opinion. *Id.* at *13.

Howard Slobodin received his B.A. from the University of Oregon in 1998 (cum laude) and his J.D. from the University of Texas School of Law in 2001 (with honors). Mr. Slobodin is the General Counsel and Secretary, Board of Directors, of the Trinity River Authority of Texas in Arlington.

Cassandra McCrae is a third-year student at The University of Texas School of Law and is now the Student Editor-in-Chief of the Texas Environmental Law Journal.

MARK A. LATHAM, *THE BP DEEPWATER HORIZON: A CAUTIONARY TALE FOR CCS, HYDROFRACKING, GEOENGINEERING AND OTHER EMERGING TECHNOLOGIES WITH ENVIRONMENTAL AND HUMAN HEALTH RISKS*, 36 WM. & MARY ENVTL. L. & POL'Y REV. 31 (2011)

In his article on environmental technology regulations, Mark A. Latham uses the BP Deepwater Horizon spill as a lens through which to explore the potential, risks, and regulations of three technologies: carbon capture and sequestration (CCS), hydraulic fracturing, and geoengineering. Mark A. Latham, *The BP Deepwater Horizon: A Cautionary Tale for CCS, Hydrofracking, Geoengineering and Other Emerging Technologies with Environmental and Human Health Risks*, 36 WM. & MARY ENVTL L. & POL'Y REV. 31, 32–33 (2011). Latham ultimately finds the regulations lacking and prescribes general regulatory guidelines for dealing with technological advancements that may have an environmental impact.

The Deepwater Horizon was “an illustration of how far oil exploration and production technology have advanced.” *Id.* at 33 (citing NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, REPORT TO THE PRESIDENT, DEEPWATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING viii (Jan. 2011)). The technological advancement embodied by the Deepwater Horizon was the ability to drill for oil in deep waters. *Id.* at 33–34. Deepwater Horizon was able to drill through “5000 feet of water . . . [and] 13,000 feet beneath the ocean floor.” *Id.* at 35. These depths are “technically demanding” and require “sophisticated drilling technology.” *Id.*

Given the degree of difficulty associated with deep-water drilling, there are a number of risks, including a “blowout.” *Id.* A blowout is caused by a loss of pressure control in the well, which is safeguarded by a blowout preventer.¹ *Id.* at 36 (citation omitted). The Deepwater Horizon oil spill resulted from a blowout. *Id.* at 35. At the time of the spill, deep-water oil exploration and production rigs were “required to have blowout preventers in place as a last resort pressure control mechanism.” *Id.* at 36 (citing 30 C.F.R. §§ 250.401(a), 250.440 (2010)).

A loss in well pressure coupled with the failure of a blowout preventer was the cause of the BP Deepwater Horizon oil spill. *Id.* at 39. Latham argues that this “worst case scenario” might have been prevented with a better regulatory structure. *Id.* Since the blowout preventer is the last resort device for deep-water oil drilling, it needs to be highly reliable. *Id.* at 37. However, blowout preventers have failed to keep pace with other technological advancements in deep-water oil drilling. *Id.* at 37–38. Not only were these blowout preventers unreliable, but this fact was also well-known to those in the industry. *Id.*

1 Blowout preventers are means of preventing blowout by “clos[ing] valves and us[ing] shear rams to seal the drill pipe and well casing to block oil and gas from escaping.” John K. Borchardt, *Avoiding the Blowout*, MECHANICAL ENGINEERING, Aug. 2010, available at http://memagazine.asme.org/Articles/2010/August/Avoiding_Blowout.cfm.

Latham argues that, while regulations ought not hinder technological innovation, they must ensure there are “fail-safe measures appropriate to the level of risk presented to human health and the environment.” *Id.* at 39, 40. Ultimately, to prevent a recurrence of a Deepwater Horizon-type disaster, “it is crucial that risks be understood and appropriate measures be put in place by industry, regulators, and policymakers to address recognized worse [sic] case environmental and human health risk scenarios.” *Id.* at 40.

A. CARBON CAPTURE AND SEQUESTRATION (CCS)

CCS is a means of storing carbon dioxide underneath the Earth’s surface. *Id.* at 42. Essentially, carbon dioxide is captured from “coal-fired power plants” using one of several methods.² *Id.* (citations omitted). After capture, the carbon is transferred—most likely using pipes—to storage in a “subsurface formation.”³ *Id.* at 42–43. If CCS were adopted as a means to combat climate change, billions of tons of carbon dioxide would need to be stored. *Id.* at 41 (citing REPORT OF THE INTERAGENCY TASK FORCE ON CARBON CAPTURE AND STORAGE 38–39 (2010), available at <http://fossil.energy.gov/programs/sequestration/ccstf/CCSTaskForceReport2010.pdf>).

Storing such large amounts of carbon dioxide creates a risk for human and environmental health. *Id.* at 44. If carbon dioxide is released from the storage well, asphyxiation could result in fatalities, as occurred in 1986 when 1700 people died from the release of carbon dioxide from a natural reservoir in Cameroon. *Id.* at 45 (citing Donna M. Atanasio, *Surveying the Risks of Carbon Dioxide: Geological Sequestration and Storage Projects in the United States*, 39 ENVTL. L. REP. NEWS & ANALYSIS 10,376, 10,386 (2009)). CCS can also contaminate groundwater, which is the most likely environmental and human health impact of CCS. *Id.* at 46.

CCS is subject to two federal statutes. First, CCS is subject to the Safe Drinking Water Act,⁴ which means that operators of CCS sites “must prepare an assessment of the geologic, hydrogeologic, geochemical, and geomechanical properties of proposed CCS sites.” *Id.* at 46–47 (citing 75 Fed. Reg. at 77,247). Essentially, CCS site operators must create models, develop safety plans, construct their carbon dioxide wells and injection measures under applicable guidelines, test and monitor their wells, and report the results of testing and monitoring to the Environmental Protection Agency. *Id.* at 47–48 (citations omitted). Second, CCS is regulated by the Clean Air Act.⁵ *Id.* at 48. Under the Clean Air Act, CCS operators must meet “record-keeping, reporting, and monitoring obligations.” *Id.* (citing 42 U.S.C. § 7414(a)(1) (2006)). The Department of Transportation also regulates the network of pipelines carrying the carbon dioxide. *Id.*

Latham argues that significant questions remain as to the efficacy of these regulations. The regulations do not address the remedial measures to be taken if, for example, a carbon dioxide well contaminates groundwater. *Id.* at 50. Furthermore, the impact of

2 These methods include: a “pre-combustion” method that employs an “integrated gasification combined cycle process”; a “post-combustion” method, which involves capturing the emissions and separating out carbon dioxide; and a process which “involves burning coal with pure oxygen.” Latham, *The BP Deepwater Horizon*, at 42 (citation omitted).

3 These subsurface formations can be either “depleted oil and gas formations”; coal seams; or “non-potable saline aquifers far below ground.” *Id.* at 43 (citations omitted).

4 42 U.S.C. §§ 300f–30j-26 (2006).

5 42 U.S.C. § 7401 et seq. (2006).

CCS is not fully understood and “global deployment of CCS will be, to some degree, an experiment.” *Id.*

B. HYDRAULIC FRACTURING

Hydraulic fracturing is a means of capturing natural gas from “formations that previously were unproductive.” *Id.* at 51 (citing IHS CAMBRIDGE ENERGY RESEARCH ASSOCS. FUELING NORTH AMERICA’S ENERGY FUTURE: THE UNCONVENTIONAL NATURAL GAS REVOLUTION AND THE CARBON AGENDA: EXECUTIVE SUMMARY 4 (2010)). Hydraulic fracturing, also called “hydrofracking,” involves using “water and chemical additives” to open fractures in shale formations, allowing natural gas to be released. *Id.* at 52 (quoting OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, HYDRAULIC FRACTURING RESEARCH STUDY 1 (2010)).

One environmental concern of hydraulic fracturing is that it uses large amounts of water, which may adversely affect surface and groundwater. *Id.* at 53. One well-known risk is “possible contamination of potable water sources.” *Id.* (citing Ian Urbina, *Regulation Lax as Gas Wells’ Tainted Water Hits Rivers*, N.Y. TIMES, Feb. 26, 2011, at A1). Although the legitimacy of this concern is debated, there have been “reported instances of groundwater contamination associated with hydraulic fracturing.”⁶ *Id.* at 53–54. For example, in 2010, the Pennsylvania Department of Environmental Protection advised residents that hydraulic fracturing had contaminated their drinking water. *Id.* at 54 (citing Mark D. Christiansen, *Legal Developments in 2010 Affecting the Oil and Gas Exploration and Production Industry*, 48 ROCKY MTN. MIN. L. FOUND. J. 177, 212–13 (2011)). As a result of the differing views on hydraulic fracturing’s impact on drinking water, the U.S. Environmental Protection Agency is researching its impact. *Id.* at 56 (citing OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, DRAFT PLAN TO STUDY THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES vii (2011)). Soil and air quality can also be impacted by hydraulic fracturing. *Id.* at 57.

Latham argues that the “current federal regulatory approach is insufficient.” *Id.* at 58. For example, hydraulic fracturing is “expressly exempt” from the Safe Drinking Water Act. *Id.* Hydraulic fracturing is not understood fully, and only recently have policymakers planned “to undertake a study of the environmental consequences of hydraulic fracturing.” *Id.* at 59 (citing OFFICE OF RESEARCH & DEV., ENVTL. PROT. AGENCY, DRAFT PLAN TO STUDY THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES vii (2011)). However, this “after-the-fact” and “limited” study is not “a comprehensive evaluation of the environmental impacts of hydraulic fracturing” because it will only examine the effect of hydraulic fracturing on drinking water and not a number of other potential negative environmental impacts. *Id.* Latham believes that this will not result in regulation that will sufficiently protect human and environmental health. *Id.*

C. GEOENGINEERING

Geoengineering is a general term that refers to “a variety of techniques . . . to cool the earth’s temperature as a way to mitigate . . . global warming.” *Id.* at 59–60 (citing

6 Groundwater contamination can occur through either the migration of the fracturing fluids or the release of methane from the formation into underground water supplies. *Id.* at 53–55 (citations omitted).

STAFF OF H. COMM. ON SCI. & TECH., 111TH CONG., ENGINEERING THE CLIMATE RESEARCH NEEDS AND STRATEGIES FOR INT'L COORDINATION 1 (Comm. Print 2010)). There are two general categories of geoengineering: (1) increasing the reflectivity of the earth; and (2) removing carbon dioxide from the earth's atmosphere (which would include CCS, discussed above). *Id.* at 60–61. Proposals for geoengineering include, *inter alia*, “seeding clouds” (adding salt to increase reflectivity of clouds), adding sulfur dioxide to the atmosphere, afforestation, and “ocean fertilization” (adding nutrients to the ocean to stimulate phytoplankton growth to sequester larger amounts of carbon dioxide) *Id.* at 61–62.

Many of the risks involved with geoengineering stem from a lack of knowledge about the proposed methods and their affects. *See id.* at 62–63 (quoting Michael C. MacCracken, World Bank, Beyond Mitigation: Potential Options for Counter-Balancing the Climatic and Environmental Consequences of the Rising Concentrations of Greenhouse Gases, Background Paper to the 2010 World Development Report 5–6 (2009)). Early research shows that some methods, such as seeding clouds or decreasing sunlight, could have adverse effects on weather patterns and water cycles. *Id.* at 63 (citations omitted). One major risk is what might happen if geoengineering “failed or malfunctioned,” as reversing or mitigating the effects might be difficult. *Id.* at 65. Finally, geoengineering could be used as a weapon for “intentionally harmful uses, such as inflicting a prolonged heat wave.” *Id.* at 67 (citing David G. Victor et al., *The Geoengineering Option: A Last Resort Against Global Warming?*, 88 FOREIGN AFF. 64, 72 (2009)).

There are currently no federal statutes dealing with geoengineering. *Id.* However, because the Soviet Union and United States were once researching the use of geoengineering, the United Nations did adopt a treaty in 1976—*The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*.⁷ *Id.* (citing Victor, *supra*, at 66–67). This treaty requires that no party to the treaty “engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.” *Id.* at 68 (quoting *The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques* [The Convention], Dec. 10, 1976, 31 U.S.T. 333, art. I). The convention does not preclude geoengineering use for “peaceful purposes.” *Id.* (quoting *The Convention*, art. III, § 1). Thus, the treaty does not prevent all uses or innovations of geoengineering. *Id.*

D. REGULATORY GUIDANCE

After reviewing these technologies and their potential risks, Latham questions: “How do we balance the need for technological innovation as a remedy for climate change and other environmental risks, while at the same time adequately regulating to protect human health and the environment without overly burdening technological innovation and creativity?” *Id.* at 69. Latham rejects an outright ban on these technologies because it does not balance the risks with the nation's energy needs, but rather favors a “thoughtful regulatory approach.” *Id.* To achieve this, Latham suggests “regulatory principles for contemplation.” *Id.* at 70.

First, Latham argues that law makers should adhere to the “precautionary principle[,]” which is to “[a]void steps that will create a risk of harm.” *Id.* (quoting Cass R.

7 31 U.S.T. 333 (Dec. 10, 1976).

Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003, 1003–04 (2003)). Latham argues that federal policymakers have ignored this principle, in favor of the “wait and see what happens” approach. *Id.* at 72. Latham further argues that international cooperation is essential to understand and mitigate the risks. *Id.* at 73. International governance should provide a “check on countries from acting in their best interests to the possible detriment of others.” *Id.* at 74.

Latham also argues that the “classic environmental regulatory approach” involving a “patchwork of state laws” needs reconsideration. *Id.* As the problems associated with these new technologies “cross state lines,” there is a need “for a unified regulatory approach that only the federal government can provide.” *Id.* at 76. This uniform approach will “prevent a race to the bottom” of states attempting to attract businesses with weak environmental regulations on new technology. *Id.* (citing Joshua D. Sarnoff, *The Continuing Imperative (But Only from a National Perspective) for Federal Environmental Protection*, 7 DUKE ENVTL. L. & POL’Y F. 225, 278 (1997)).

Finally, Latham calls for the reduction of dependency on fossil fuels. *Id.* at 78. In evaluating the risks and effects of new technologies, Latham argues that it is important to remember that “the need to wean ourselves off fossil fuels cannot be forgotten as we consider how best to regulate emerging technologies.” *Id.* at 78–79 (citing Alan Robock, *20 Reasons Why Geoengineering May Be a Bad Idea*, BULL. OF THE ATOMIC SCIENTIST, May/June 2008, at 17).

Joshua D. Katz is an attorney with Bickerstaff Heath Delgado Acosta LLP in Austin. Mr. Katz practices environmental law, administrative law, water law, and electric utility regulation and related litigation. He received his law degree from the University of Houston Law Center.

Grant Margeson is a third-year student at The University of Texas School of Law and is a staff member of the Texas Environmental Law Journal.

FIRST FEDERAL RULE REGULATING AIR EMISSIONS PERTAINING TO HYDRAULICALLY-FRACTURED NATURAL GAS WELLS

In August 2012, the U.S. Environmental Protection Agency (EPA) issued a new air emissions limitation rule regulating the drilling of natural gas wells when the highly scrutinized process of hydraulic fracturing is used. 40 C.F.R. Parts 60 and 63 (2012). Hydraulic fracturing, or “fracking” as it is commonly known, is a method of natural resource extraction used by the oil and gas industry that involves creating fractures in rock formation to “stimulate the flow of natural gas or oil, increasing the volumes that can be recovered.” *The Process of Hydraulic Fracturing*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/hydraulicfracturing/process.html>. Hydraulic fracking in particular has allowed for better access to large quantities of natural gas located in shale formations within the United States. *Natural Gas Extraction*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/hydraulicfracture>.

Vast reserves of natural gas located within the United States are now available for extraction due to advances in hydraulic fracking technologies. *Id.* By 2035, the United States could very well be energy independent, according to the International Energy Agency. *North America Leads Shift in New Energy Balance*, INTL. ENERGY AGENCY (Nov. 15, 2012), <http://www.iea.org/newsroomandevents/pressreleases/2012/november/name,33015,en.html>.

While hydraulic fracking allows for large advances in the energy industry, it is not without its costs and critics. The Obama Administration has been reluctant to join the anti-fracking bandwagon, despite the Democratic Party’s traditionally green-leaning views. *Ohio’s Gas-Fracking Boom Seen Aiding Obama in Swing State*, BLOOMBERG NEWS (Nov. 15, 2012), <http://www.businessweek.com/news/2012-09-03/ohio-s-gas-fracking-boom-seen-aiding-obama-in-swing-state#p2>. A potential explanation is that despite possible environmental risk, fracking has provided not only a surge in oil and gas resources available from within the nation but also has provided desperately needed jobs in a struggling economy. *Id.*

According to studies conducted by EPA, in areas of natural gas development there have been measurable air-quality impacts of increases in emissions of methane, volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). 77 Fed. Reg. 49490 (Aug. 16, 2012). These potentially harmful impacts have been reported in communities located in the vicinity of natural gas fracking operations. *US Caps Emissions in Drilling For Fuel*, N.Y. TIMES (Nov. 15, 2012), <http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html>. While EPA recognizes the need for domestic natural gas development, it has nevertheless issued new regulations to protect air quality that are the “first federal air standards for natural gas wells that are hydraulically fractured.” 77 Fed. Reg. 49490; *see also Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. EPA has issued air emissions standards that apply to hydraulic fracturing under authority granted by § 111(b) of the Clean Air Act (CAA). 77 Fed. Reg. 49496. The process of establishing emissions standards began when WildEarth Alliance filed suit against EPA under section 304(a)(2) of

the Clean Air Act. *Id.* WildEarth “alleged that [] EPA failed to meet its obligations under CAA §§ 111(b)(1)(B), 112(d)(6) and 112(f)(2) to take actions relative to the review/revision of the NSPS [New Source Performance Standards] and the NESHAP [National Emission Standards for Hazardous Air Pollutants] with respect to the Oil and Natural Gas Production source category.” 77 Fed. Reg. 49496, *see also* *Wildearth Guardians v. Stephen L. Johnson, et al.*, Case 1:09-cv-00089-CKK (D. D.C., filed Jan. 14, 2009), Complaint for Declaratory Judgment and Injunctive Relief, available at <http://www.uschamber.com/sueandsettle/pleadings/Wildeath%20Guardians%20v.%20Jackson%20%28Oil%20and%20Gas%29/complaint.pdf>. The litigation resulted in the court issuing a consent decree compelling EPA to come up with proposed rules to regulate fracking emissions standards by July 2012 and further requiring EPA to issue the final rules no later than April 2012. *Wildearth Guardians v. Lisa P. Jackson, et al.*, Case 1:09-cv-00089-CKK (D. D.C., filed Jan. 14, 2009), Consent Decree, available at <http://www.uschamber.com/sueandsettle/pleadings/Wildeath%20Guardians%20v.%20Jackson%20%28Oil%20and%20Gas%29/ConsentDecreeEntered.pdf>.

EPA issued the regulations on April 17, 2012 with a comment period before the final rule was to be issued as required under the CAA. 77 Fed. Reg. 49490; *see also* *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012) <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. The final version of the regulations, released in August 2012, took into account concerns addressed during the period. *See* 77 Fed. Reg. 49490. The newly established rules, the New Source Performance Standards, apply to fracking for natural gas but do not apply to fracking at oil wells. *Id.* at 49492. The New Source Performance Standards are expected to accomplish the goal of reducing VOCs and methane from below ground wells that are released into the air during the extraction of natural gas by fracking. *US Caps Emissions in Drilling For Fuel*, N.Y. TIMES (Nov. 15, 2012), <http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html>. Toxic chemicals such as benzene, hexane, and methane released during the drilling of approximately 13,000 hydraulic fracking wells each year have caused health problems and environmental damage according to citizens and environmental groups. *Id.* EPA plans to reduce VOCs emitted each year by close to 95 percent, primarily through the use of the process of “green completion”, also known as “reduced emissions completion.” *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>. Green completion will prevent the emitting of VOCs and other chemicals into the air by using equipment capable of capturing the natural gas that currently escapes containment during hydraulic fracking. *Id.* Green completion will, according to EPA, “reduce ground level ozone in areas where oil and gas production occurs.” *Id.* Methane emissions would also be reduced from new and modified wells. *Id.* Methane, part of the makeup of natural gas, is of particular concern due to its status as a greenhouse gas. *Id.*

The process of green completion involves bringing portable equipment to a fracking site. *Reduced Emissions Completions For Hydraulically Fractured Natural Gas Wells*, ENVTL. PROT. AGENCY, (Nov. 15, 2012) http://www.epa.gov/gasstar/documents/reduced_emissions_completions.pdf. The equipment “separate[s] the gas from the solids and liquids produced during the high-rate flowback, and produce[s] gas that can be delivered into the sales pipeline.” *Id.* at 1. Effectively, the process captures valuable resources from escaping while also preventing a substantial amount of pollution. *See* *Overview of Final*

Amendments to Air Regulations For the Oil and Natural Gas Industry, ENVTL. PROT. AGENCY (Nov. 15, 2012) <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>.

EPA envisions the new regulations as a win-win for both industry and environmental regulators. According to EPA, the regulations are cost-effective for the energy industry because the market value of the natural gas captured during green completion should exceed the cost of compliance with the regulations. *Id.* EPA estimates that, when the rules are fully implemented, industry cost savings could reach \$11 million. 77 Fed. Reg. at 49492. In addition, a number of states and cities already require green completion, while some companies within the industry utilize it voluntarily. *Overview of Final Amendments to Air Regulations For the Oil and Natural Gas Industry*, ENVTL. PROT. AGENCY (Nov. 15, 2012), <http://www.epa.gov/airquality/oilandgas/pdfs/20120417fs.pdf>.

CHALLENGES/LITIGATION

The final rules for New Source Performance Standards were issued in August 2012. 77 Fed. Reg. 49460. However, eight parties—including industry, state, and environmental agencies—filed challenges to the regulations by the October 15, 2012 deadline. *Independent Petroleum Association of America, et al. v. U.S. Env'tl. Protection Agency*, Cause No. 12-1408, Petition for Review (D.C. Cir., filed Oct. 15, 2012), available at <http://federal.eregulations.us/rulemaking/document/EPA-HQ-OAR-2010-0505-4581> (hereafter Spilman Petition); see also *Court Challenges to EPA's Oil and Gas Air Emissions Rules Filed*, THE STATE J. (Nov. 15, 2012), <http://www.statejournal.com/story/19926696/court-challenges-to-epas-oil-and-gas-air-emissions-rules-filed>. Among the challenging parties from within the oil and gas industry is a group representing small natural gas producers. See Spilman Petition. These producers argue that EPA's emission standards unfairly burden smaller operations. *Id.* The law firm of Spilman, Thomas, and Battle filed a petition for review on behalf of small natural gas producers, representing the Independent Petroleum Association of America, the Independent Oil and Gas Association of West Virginia, the Kentucky Oil & Gas Association, the Indiana Oil and Gas Association, the Pennsylvania Independent Oil & Gas Association, the Ohio Oil and Gas Association, and the Illinois Oil & Gas Association. A primary concern of these parties is that EPA chose a "one-size fits all" approach based on industry averages to support for its final rule. See Spilman Petition. These parties contend that, while green completion may be cost-effective for larger hydraulic fracking operations, it is not cost-effective for smaller operations. *Id.* Compliance may not be cost-effective for low-VOC natural gas wells. *Id.* Hydraulic fracking wells come in different varieties, despite EPA's assumptions during studies. *Id.* Some wells are "low-pressure, low-volume vertical wells and some are fractured using nitrogen or carbon dioxide rather than water—all of which makes the requirement for capturing or flaring emissions during flowback infeasible." *Id.* The Spilman Petition indicates a belief that EPA will make changes via supplemental rulemaking to not force small independent operators out of business. *Id.*

The American Petroleum Institute (API), representing more than 500 oil and natural gas companies, has also advocated for crucial reforms to the New Source Performance Standards issued by EPA. Like the Spilman Petition, API also takes issue with EPA's one-size-fits-all approach. *Howard Feldman Press Briefing*, AM. PETROLEUM INST. (Apr. 2012), <http://www.api.org/news-and-media/testimony-speeches/2012/howard-feldman-press-briefing-teleconference-on-epa-proposed-oil-gas-emission-rules.aspx>. API has shown concern over the rules applying to operations in which very little of the regulated

pollutants are being released during drilling. *Id.* A key concern is the assumptions made by EPA in assessing whether or not the regulations are actually cost-effective for industry. Gerard, *New Source Performance Standards for the Oil and Gas Sector* (Apr. 12, 2011), <http://www.api.org/news-and-media/news/newsitems/2012/apr-2012/~media/Files/News/2012/12-April/OGAdministratorLtr.ashx>. When proposing the rule, EPA assumed a fixed VOC gas content of 18%, which API argues is much higher than many of the small or temporary fracking operations contain. *Id.* API suggests that the regulations can only be cost-effective when the VOC content is 10% or higher. *Id.* Due to these concerns, API seeks to have the rules only apply to sources of significant VOCs, arguing that “a rule that applies without regard to VOC content is beyond EPA’s authority” under § 111 of the CAA. *Id.* (linking to comment letter).

API has also criticized EPA’s schedule for implementing the rules. *Howard Feldman Press Briefing*, AM. PETROLEUM INST. (Apr. 2012), <http://www.api.org/news-and-media/testimony-speeches/2012/howard-feldman-press-briefing-teleconference-on-epa-proposed-oil-gas-emission-rules.aspx>. According to API, green completion equipment is neither readily available nor easily manufactured on the scale EPA’s rule would require. *Id.* API estimates it would require between two to three years to manufacture the necessary amount of equipment and to train personnel to properly operate it. *Id.* Finally, API contends that compliance with the rule could be more easily achieved if the “system of notifications, monitoring, recordkeeping, performance testing and reporting requirements for compliance assurance were simplified.” *Id.*

Despite its concerns, API maintains that it is not against rules regulating emissions during hydraulic fracturing of natural gas wells. *Id.* Rather, API is of the viewpoint that the industry is already leading efforts to reduce environmental harm and lower greenhouse gas emissions. *Id.* API points out that the energy industry is in the business of capturing gases such as methane, which they can then market. *Id.* The viewpoint is that industry has no incentive to lose potential profits by letting the gas float into the atmosphere. *See id.* Also, API states that industry was responsible for designing the equipment that green completion would rely on. *Id.* EPA appears to be working with API on these regulations, as evidenced by the final rules issued after the comment period, which now will go into effect on January 1, 2015 rather than being effective immediately. 77 Fed. Reg. 49460, *see also EPA’s Final Rule Limiting Air Emissions From Fracking Operations*, FULBRIGHT & JAWORSKI (Nov. 15, 2012), <http://fulbrightfrackingblog.blogspot.com/search/label/NSPS>. Time will tell if even more of the rules will change.

Laura LaValle is an attorney who specializes in Clean Air Act matters at Beveridge and Diamond, P.C. in the Firm’s Austin, Texas office.

Darrin Wyatt is a third-year student at The University of Texas School of Law and a staff member of the Texas Environmental Law Journal.