

27TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

The 27th Annual Texas Environmental Superconference
"The Greatest Thing Since Sliced Bread"



TO: Attendees

FROM: Planning Committee

DATE: August 6, 2015

On behalf of the Environmental and Natural Resources Law Section of the State Bar of Texas, the Air and Waste Management Association-Southwest Section, the Water Environment Association of Texas, the Texas Association of Environmental Professionals, the Auditing Roundtable, and the American Bar Association Section of Environment, Energy & Resources, welcome to the 27th Annual Texas Environmental Superconference – "The Greatest Thing Since Sliced Bread."

Course materials are both in print (for those who ordered them) and online. The online materials may be downloaded at the section's website, www.texenrls.org, using the password "cliché."

As always, there are evaluation forms for the program. We appreciate your taking the time to complete them. The organizers of this program take these forms into account in planning next year's conference. In addition, if you have an interest in having a particular topic presented or in speaking on a particular topic, the evaluation form is the appropriate place to provide that information.

We would appreciate suggestions for themes for next year's conference, which is scheduled, as always, beginning the first Thursday in August, that is, August 4-5, 2016. Please mark your calendars. Please let us know too if you have any suggested topics for our Wednesday evening program, which traditionally has been a primer on a selected topic.

Please provide any comments or suggestions to any member of the Planning Committee at the conference, or, thereafter, to Jeff Civins at (512) 867-8477 or jeff.civins@haynesboone.com.

Thanks!

27th ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

"The Greatest Thing Since Sliced Bread"

(A Cliché-Filled Program)



Thursday-Friday, August 6-7, 2015
Four Seasons Hotel

Thursday, August 6, 2015

8:00 – 8:35 REGISTRATION/CONTINENTAL BREAKFAST -- *"The Early Bird Gets the Worm"*

8:35 – 9:00 OPENING REMARKS – *"Well This Is A Fine How Do You Do"*

Jeff Civins, Texas Environmental Superconference
Jean Flores, Environmental and Natural Resources Law Section, State Bar of Texas
Peter Belmonte, Air & Waste Management Association, Southwest Section
Julie Nahrgang, Water Environment Association of Texas
Mike McClellan, Texas Association of Environmental Professionals
Michael Byington, Auditing Roundtable
Danny Worrell, ABA Section of Environment, Energy & Resources

* * * * *

Moderator: Connie Westfall, Strasburger & Price, LLP

Tab 1 9:00 – 9:30 CASE LAW UPDATE – *"That's It in a Nutshell"*
Chris Smith, Thompson & Knight LLP

Tab 2 9:30 – 10:00 LEGISLATIVE UPDATE – *"There ought to be a law . . ."*

Ashley Morgan, Senior Legislative Advisor, Office of the Governor

10:00 – 10:15 BREAK – *"Take It or Leave It"—sponsored by Terracon*

[Skits 1 and 2]

* * * * *

Moderator: Peter Gregg, Fritz, Byrne, Head & Fitzpatrick, PLLC

Tab 3 10:15 – 10:45 EPA ENFORCEMENT
"An Ounce of Prevention is Worth a Pound of Cure"
Larry Starfield, Principal Deputy Assistant Administrator, EPA DC

Tab 4 10:45 –11:20 SOLID/HAZARDOUS WASTE ISSUES – *"Waste Not, Want Not"*
Al Axe, Winstead PC
Bryan Moore, Beveridge & Diamond PC

Tab 5 11:20 – 12:00 ENERGY DEVELOPMENT – WHERE ARE WE HEADED
"It's tough to make predictions, especially about the future"
Scott W. Tinker, Director, Bureau of Economic Geology,
The University of Texas at Austin

12:00 – 1:15 LUNCH – *"Something to Chew on" – sponsored by ERM*

[Skits 3 and 4]

Moderator: Carrick Brooke-Davidson, Guida, Slavich & Flores, P.C.

Tab 6 1:15 – 2:15 AIR QUALITY PANEL – *"It's an Ill Wind that Blows No Good"*
Zach Craft, Baker Botts L.L.P.
Julie Domike, Haynes and Boone, LLP
John Minter, TCEQ
Ilan Levin, Environmental Integrity Project

Tab 7 2:15 – 2:50 METHANE IN THE OILPATCH – *"Now You're Cooking with Gas"*
Erin Selvera, TCEQ
Bob Greenslade, Norton Rose Fulbright

Tab 8 2:50 – 3:20 VIEW FROM DOJ – *"Walk Softly and Carry a Big Stick"*
John Cruden, Assistant Attorney General, Environment and Natural Resources Division, U.S. Department of Justice --

3:20 – 3:35 BREAK – *"That's the Way the Cookie Crumbles"—sponsored by Geosyntec*

[Skits 5 and 6]

Moderator: Arnoldo Medina, Chevron U.S.A., Inc.

Tab 9 3:35 – 4:15 JOINT TALK ON EPA/TCEQ RELATIONS – *"It Takes Two to Tango"*
Bryan Shaw, Chairman, TCEQ
Ron Curry, Regional Administrator, EPA Region 6

Tab 10 4:15 – 5:15 PREEMPTION (fed-state and state-local) – *"The Tail Wagging the Dog"*
Phillip Goodwin, City of Houston
Marisa Perales, Frederick, Perales, Allmon & Rockwell, PC
Richard Faulk, Hollingsworth, LLP

5:15 – 6:00 RECEPTION – *"Eat, Drink and be Merry"—sponsored by Cirrus*

Friday, August 7, 2015

8:00 – 8:25 CONTINENTAL BREAKFAST -- *"Wake Up and Smell the Coffee"*

8:25 – 8:30 OPENING REMARKS – *"Let's Get the Show on the Road"*

* * * * *

Moderator: Lydia González Gromatzky, Andrews Kurth LLP

Tab 11 8:30 – 9:15 PLANNING FOR AND DEALING WITH CATASTROPHIC RELEASES
"Better Safe Than Sorry"
Debra Baker, Baker Wotring LLP
John Kind, CTEH

Tab 12 9:15 – 10:00 COASTAL ISSUES -- *"The Tide's Beginning to Turn"*
Toby Baker, Commissioner, TCEQ
Carter Smith, Executive Director, Texas Parks & Wildlife Department

10:00 – 10:15 BREAK – *"Hold That Thought"—sponsored by Pastor, Behling & Wheeler LLC*

[Skits 7 and 8]

Moderator: Lisa Hodges, Valero

Tab 13 10:15 – 11:00 WATER ISSUES – *"That's Water Under the Bridge"*
Sara Burgin, Katten Muchin Rosenman LLP
Brad Castleberry, Lloyd Gosselink Rochelle & Townsend, P.C.

Tab 14 11:00 – 12:00 CLEAN POWER – *"The Sky's the Limit"*
Suzanne Murray, Haynes and Boone, LLP
Rich Alonso, Bracewell & Giuliani
Mike Nasi, Jackson Walker L.L.P.

[Skit 9-15]

12:00 – 1:15 LUNCH
"A Few Fries Short of a Happy Meal"-- co-sponsored by CH2MHill and Exponent

	1:15 – 1:30	SBOT ENRLS Meeting -- *"There's No Such Thing as a Free Lunch"*
		* * * * *
	Moderator:	Cindy Bishop, C Bishop Law PC
Tab 15	1:30 – 2:30	DEVELOPMENT HYPOTHETICAL *"A Bird in the Hand is Worth Two in the Bush"* Tom Campbell, Pillsbury Winthrop Shaw Pittman LLP Charles Irvine, Irvine & Conner Mike Wigmore, Vinson & Elkins LLP
Tab 16	2:30 – 3:00	ETHICAL ISSUES ASSOCIATED WITH ADMINISTRATIVE LOBBYING *"Damned if You Do, Damned if You Don't"* Ross Ramsey, Texas Tribune
Tab 17	3:00 – 3:30	ETHICS -- *"Straighten Up and Fly Right"* Booker Harrison, TCEQ
	3:30	ADJOURN – *"All's Well that Ends Well"* Sundaes – *"Good Things Come to Those who Wait"—sponsored by RPS*

CLE: Accreditation of this activity has been approved by the MCLE Committee of the State Bar of Texas for 11.75 Hours in Continuing Legal Education Credits, including 1.0 hour of Ethics. This program has also been certified by the Texas Board of Legal Specialization for continuing legal education requirements for attorneys and legal assistants in the following specialty fields, for 11.75 hours each: Administrative Law; Civil Trial Law; Civil Appellate Law; Oil, Gas and Mineral Law; and Real Estate. The course number is 901320317.

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For more than 29 years, Constance ("Connie") Westfall has represented industrial and institutional clients on a wide range of environmental matters. Connie is a Partner at Strasburger & Price, LLP.

Connie assists industrial facilities to develop, implement and assess their permitting and compliance strategies. She has represented petroleum refineries, steel manufacturing facilities, and commercial hazardous waste facilities in auditing, enforcement matters and in the investigation and remediation of contaminated soil and groundwater. Connie has litigated an extensive variety of environmental legal issues before federal and state agencies and courts and currently serves as Co-Chair of the U.S. Oil Recovery Site PRP Group, a federal Superfund Site.

Connie is a past chair of the State Bar Environmental and Natural Resources Law Section. She frequently writes and speaks on environmental topics, including the recently published *Navigating Water Use and Pollution Laws* (Aspatore Books). Connie is one of the contributing authors to the ESSENTIALS OF TEXAS WATER RESOURCES treatise and TEXAS ENVIRONMENTAL LAW, Texas Practice Series.

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Connie received her Juris Doctor, with Honors, from the University of Texas School of Law where she served as the Research Editor on the Texas Law Review, and a Bachelor of Science, with Highest Honors, from the University of Texas at Austin. She was a Judicial Clerk to the United States Court of Appeals, Fifth Circuit. Connie has been recognized in *Who's Who in America* and *Who's Who in American Law*.

Case Law Update

Presented at:
State Bar of Texas
27th Annual Texas Environmental Superconference
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Austin, Texas

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I. U.S. SUPREME COURT

a. EPA's Mercury and Air Toxics Rule

In *Michigan v. Environmental Protection Agency*, No. 14-46, 2015 WL 2473453 (June 29, 2015), the Supreme Court overturned EPA's mercury and air toxics or "MATS" rule affecting electric utility steam generating units (power plants). Justice Scalia authored the majority opinion and was joined by Chief Justice Roberts and Justices Kennedy, Thomas, and Alito. Under the Clean Air Act, Congress established a unique procedure to determine the applicability of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) program to power plants. Congress directed EPA to study the public health hazards anticipated to occur as a result of emissions of hazardous air pollutants from power plants after the imposition of other Clean Air Act regulatory requirements. Only if the agency finds "regulation is *appropriate* and *necessary* after considering the results of the study", 42 U.S.C. § 7412(n)(1)(A), shall EPA regulate power plants under the NESHAP program.

In issuing the MATS rule, EPA found regulation "appropriate" because power plants' emissions of mercury and other hazardous air pollutants posed risks to human health and the environment and controls were available to reduce those emissions. The agency found regulation "necessary" because the imposition of the Clean Air Act's other requirements did not eliminate these risks. EPA expressly concluded that costs should not be considered when deciding whether power plants should be regulated.

Although EPA did not consider costs in deciding whether to regulate, it did prepare a regulatory impact analysis and estimated that the regulation would force power plants to bear costs of $9.6 billion per year. EPA estimated the direct benefits to be worth $4 to $6 million per year and that the ancillary benefits of cutting emissions of other pollutants, including particulate matter and sulfur dioxide, would be $37 to $90 billion per year.

The Court applied *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), to evaluate EPA's interpretation that "appropriate and necessary" does not require consideration of costs. The Court concluded that the natural interpretation of "appropriate and necessary" requires "at least some attention to cost" and thus EPA's interpretation was not entitled to deference. "EPA strayed well beyond the bounds of reasonable interpretation in concluding that cost is not a factor relevant to the appropriateness of regulating power plants." While the Court declined to hold that the statute required that EPA engage in a formal cost-benefit analysis, it held that EPA must account for various costs in its decision to regulate.

b. Agency Interpretive Rules

In *Perez v. Mortgage Bankers Association*, 135 S. Ct. 1199 (2015), the United States Supreme Court held that federal agencies do not have to comply with notice-and-comment procedures when they desire to change an interpretive rule. The Administrative Procedure Act (APA) distinguishes between two types of rules: legislative rules that have the force and effect of law and interpretative rules, which are issued to advise the public of the agency's construction of the statutes it administers. When a federal agency first issues an interpretative rule, it is

generally not required to follow the notice-and-comment rulemaking procedures of the APA. But in a line of cases beginning with *Paralyzed Veterans of America v. D.C. Arena L.P.*, 117 F.3d 579 (D.C. Cir. 1997), the D.C. Circuit held that an agency must use the APA's notice-and-comment procedures when it wishes to issue a new interpretation of a regulation that deviates significantly from one previously adopted. The Supreme Court held that the *Paralyzed Veterans* doctrine is contrary to the clear text of the APA. Thus, future amendments or changes to agency interpretative rules need not go through notice-and-comment.

II. D.C. CIRCUIT COURT OF APPEALS

a. Challenge to Section 111(d) Proposed Rule

In *Murray Energy v. Environmental Protection Agency*, No. 14-1112, 2015 WL 3555931 (D.C. Cir. June 9, 2015), Murray Energy and a dozen states filed suit seeking judicial review of EPA's proposed rule under Section 111(d) of the Clean Air Act to restrict carbon dioxide emissions from existing coal-fired and natural gas-fired power plants. The D.C. Circuit declined to review the legality of the proposed rule, instead holding that the proposed rule was not a final agency action.

The petitioners made three arguments. First, they argued that the court had authority under the All Writs Act to consider the challenge before the issuance of a final rule because the proposed rule alone was causing the petitioners to incur costs. The court disagreed, holding that the All Writs Act did not authorize the court to circumvent finality principles of administrative law. Second, the petitioners argued that EPA's public statements about its legal authority under Section 111(d) constituted a final agency action. Rejecting this argument, the court noted that statements about legal authority unconnected to any final rule or other action, do not impose any legal obligations on the petitioners. Third, the petitioners challenged a 2011 settlement agreement requiring EPA to decide whether to regulate carbon dioxide emissions from existing power plants. The court held that the petitioners lacked standing to challenge the settlement agreement because the settlement agreement did nothing more than set a timeline for an agency decision, and did not constitute the decision itself. Thus, the court's decision upheld the principle that preliminary agency actions, including proposed rules, are not subject to judicial review.

b. Greenhouse Gas Permitting of Stationary Sources

In *Coalition for Responsible Regulation, Inc. v. Environmental Protection Agency*, No. 09-1322, 2015 WL 3462999 (D.C. Cir. Apr. 10, 2015), the D.C. Circuit amended its June 26, 2012 order in accordance with the Supreme Court's decision in *Utility Air Regulatory Group v. Environmental Protection Agency*, 134 S. Ct. 2427 (2014), which invalidated part of EPA's greenhouse gas permitting regulations. The amended order vacates EPA's regulations: (1) to the extent they require a stationary source to obtain a Prevention of Significant Deterioration permit if greenhouse gasses are the only pollutant that the source emits or has the potential to emit above the applicable major source thresholds, or for which there is a significant emissions increase from a modification; (2) to the extent they require a stationary source to obtain a Title v. permit solely because the source emits or has the potential to emit greenhouse gases above the applicable major source thresholds; and (3) to the extent they require the EPA to consider further

phasing-in the requirements identified in (1) and (2) above at lower greenhouse gas emission thresholds.

c. Ozone Rulemaking

In *Natural Resources Defense Council v. Environmental Protection Agency*, 777 F.3d 456 (D.C. Cir. 2014), the D.C. Circuit held that EPA's regulations implementing the 2008 National Ambient Air Quality Standards (NAAQS) for ozone exceeded the agency's statutory authority. One of the changes to the NAAQS was to allow affected regions more time to attain the new ozone standards. Specifically, rather than setting attainment periods based on the compliance table in the Clean Air Act, 42 U.S.C. § 7511(a)(1) tbl. 1, the agency extended the deadlines by several months to December 31 of the corresponding calendar year. The court held that the statutory language provided no basis for EPA to extend the deadlines.

Second, EPA revoked the 1997 one-hour ozone NAAQS for purposes of the transportation conformity requirements. The transportation conformity requirements, 42 U.S.C. § 7506(c), condition federal approval and funding of transportation activities on demonstrated compliance with applicable State Implementation Plans. The court held that the Clean Air Act clearly requires maintaining the transportation conformity requirements in affected areas. Thus, the court vacated these two aspects of the regulation.

III. FIFTH CIRCUIT COURT OF APPEALS

a. Reviewability of U.S. Army Corps of Engineers Jurisdictional Determination

In *Belle Co. v. United States Army Corps of Engineers*, 761 F.3d 383 (5th Cir. 2014), the Fifth Circuit held that a jurisdictional wetlands determination issued by the Corps was not a reviewable final agency action. The landowner, Belle, planned to construct a landfill and requested a jurisdictional determination or "JD" from the Corps. After conducting a field inspection, the Corps issued an initial JD stating that part of the property was wetlands. Belle appealed the decision through the agency's administrative appeal process and, after additional investigation and review, the Corps upheld the JD. Belle sued in district court for declaratory relief to set aside the JD as unlawful. The district court dismissed the case for lack of subject-matter jurisdiction, and Belle appealed.

The primary issue on appeal was whether the JD was reviewable as a final agency action under the Administrative Procedure Act in light of the Supreme Court's decision in *Sackett v. Environmental Protection Agency*, 132 S. Ct. 1367 (2012). Two conditions must be satisfied for an agency action to be final: (1) the action must mark the consummation of the agency's decision-making process, and (2) the action must be one by which rights or obligations have been determined. On the first condition, the Fifth Circuit agreed with Belle, holding that in issuing the JD the Corps asserted its ultimate administrative position regarding the presence of wetlands on the property.

But the court was not persuaded that rights or obligations had been determined as a consequence of the JD. The court noted that every court that has considered this issue, both before and after *Sackett*, has held that a JD is not a reviewable agency action. Unlike the compliance order in *Sackett*, the JD imposed no penalties and did not require Belle to do

anything. In the court's view, the JD merely informed Belle of the necessity to obtain a permit or face an enforcement action. If the Corps denied a permit application or initiated enforcement, Belle would have adequate opportunity to litigate the issue of whether wetlands were in fact present on the property. Allowing Belle to first challenge a wetlands determination and then later seek judicial review of a final agency permitting or enforcement action would disrupt the regulatory system in place. Consequently, the court held that the JD is not reviewable agency action under the Administrative Procedure Act.

b. Definition of "Facility" Under the Clean Water Act

In re Deepwater Horizon, 772 F.3d 350 (5th Cir. Nov. 5, 2014), *cert. denied*, 83 U.S.L.W. 3769 (June 29, 2015); 83 U.S.L.W. 3805 (June 29, 2015), is an appeal of one aspect of the federal government's civil enforcement action under section 311 of the Clean Water Act against BP Exploration & Production, Inc. and Anadarko Petroleum related to the 2010 Deepwater Horizon spill. BP and Anadarko were co-owners of the Macondo Well. The owner of the *Deepwater Horizon*, Transocean, had previously settled with the government.

Section 311 of the Clean Water Act is a strict liability provision, and provides for the assessment of fines on the owners or operators of any vessel or facility "from which oil or a hazardous substance is discharged." 33 U.S.C. § 1321(b)(7)(A). The government moved for partial summary judgment on the issue that BP and Anadarko were the owners or operators of a facility under section 311. The district court granted that motion and in a previous opinion the Fifth Circuit affirmed. *In re Deepwater Horizon*, 753 F.3d 570 (5th Cir. 2014). BP and Anadarko filed petitions for en banc rehearing and requested that the panel reconsider its judgment affirming the lower court's grant of partial summary judgment.

In this opinion, the panel again affirmed the decision of the district court and held that the Macondo Well was a "facility" under section 311. Interpreting the statute, the court held that a vessel or facility is a point "from which oil or a hazardous substance is discharged" if it is a point at which controlled confinement is lost. Because controlled confinement of the oil was lost in the Macondo Well, the well was a facility or vessel.

BP and Anadarko's main argument was that for any given discharge, only one instrumentality can bear liability under section 311. The court squarely rejected this proposition, noting that even if the *Deepwater Horizon*'s operators were culpable that fact did not exempt the owners of the Macondo Well from liability. In any event, the court stated that it did not need to consider whether the oil discharged from the Macondo Well might also have constituted a discharge from the *Deepwater Horizon.*

c. CERCLA Arranger Liability

In *Vine Street LLC v. Borg Warner Corp.*, 776 F.3d 312 (5th Cir. 2015), a property owner sued a dry cleaning equipment manufacturer, Borg Warner, seeking contribution for perchloroethylene ("PERC") contamination to the property under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Texas Solid Waste Disposal Act (TSWDA). A Borg Warner subsidiary sold dry cleaning machines, supplied PERC, and designed the drainage system for a former dry cleaner located on the property. As

part of the drainage system, the subsidiary equipped the dry cleaning machines with water separators that would recycle PERC. After a bench trial, the district court found Borg Warner was liable as an arranger under CERCLA, 42 U.S.C. § 9607(a)(3), and the TSWDA, TEX. HEALTH & SAFETY CODE § 361.271(a)(3), and that Borg Warner was 75% responsible for past, present, and future cleanup costs.

The Fifth Circuit, applying *Burlington Northern & Santa Fe Ry. Co. v. United States*, 556 U.S. 599 (2009), reversed the district court. Under *Burlington Northern*, the plaintiff must prove that the purported arranger took intentional steps to dispose of a hazardous substance. The court of appeals relied heavily on the district court's finding that no party intended to allow the discharge of PERC. The mere fact that Borg Warner's subsidiary knew that the water separators would not recover all of the PERC was insufficient to establish intent. Consequently, Borg Warner was not a CERCLA arranger. The Fifth Circuit, stating that the Texas Supreme Court would likely apply *Burlington Northern* to the TSWDA, also concluded that Borg Warner was not an arranger under the TSWDA.

IV. OTHER U.S. COURTS OF APPEALS

a. Judicial Review of Agency Action by Beneficiary

In *Shell Gulf of Mexico, Inc. v. Center for Biological Diversity*, 771 F.3d 632 (9th Cir. 2014), Shell sought a declaratory judgment that the Bureau of Safety and Environmental Enforcement's approval of the company's oil spill response plans did not violate the Administrative Procedure Act. Shell claimed that it needed swift determination of the legality of the approval so that it could conduct exploratory drilling without worrying that environmental groups would seek to overturn the Bureau's approval of the spill response plans. The court described Shell's lawsuit as "a novel litigation strategy, whereby the beneficiary of agency action seeks to confirm its lawfulness by suing those who it believes are likely to challenge it." The Ninth Circuit rejected this approach because the strategy violates the case and controversy requirement of Article III of the United States Constitution. Specifically, the court determined that no adverse legal interests exist between the environmental groups and Shell and therefore the court lacked jurisdiction.

b. Standards Applicable to Prevention of Significant Deterioration Permitting

In *Sierra Club v. Environmental Protection Agency*, 762 F.3d 971 (9th Cir. 2014), Avenal Power applied to the EPA for a Prevention of Significant Deterioration Permit to build and operate a 600 megawatt natural gas-fired power plant. Although the Clean Air Act required EPA to either grant or deny the permit application within one year, the agency failed to act. After the deadline passed but before taking any action, EPA adopted more stringent National Ambient Air Quality Standards (NAAQS) and revised the applicable Best Available Control Technology (BACT) requirements.

Avenal Power sued to force EPA to issue the permit under the old standards that would have applied had EPA acted within the statutory deadline. EPA ultimately granted the permit without regard to the new regulations, contending that under narrow circumstances the agency

has the authority to grandfather certain permit applications. Four environmental groups challenged EPA's action as being contrary to the Clean Air Act.

After finding that the environmental groups had associational standing, the court applied the standard of *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), to EPA's action. Under the first *Chevron* prong, the court determined that Congress had unambiguously required EPA to enforce existing rules, including BACT requirements, in issuing permits. The Court rejected the agency's argument that the statute's provisions mandating that EPA enforce current NAAQS and BACT requirements somehow conflicted with the provision requiring EPA to act on a permit within one year. The court reasoned that "nothing in the statute precludes EPA from enforcing current NAAQS and BACT requirements even if it unreasonably delays taking action on a permit." Finally, the court distinguished EPA's decision to not apply existing requirements in this case from other efforts by the agency to grandfather facilities. Grandfathering is permissible if done through formal notice and comment procedures and through applicability dates incorporated into a rule. But the agency lacks the authority to simply decide to not apply existing standards on a case-by-case basis.

c. *Lone Pine* Orders and Motions to Dismiss

In *Adinolfe v. United Technologies Corp.*, 768 F.3d 1161 (11th Cir. 2014), the Eleventh Circuit addressed whether a trial court could issue a *Lone Pine* order, requiring a plaintiff to provide prima facie factual support for their claims, before determining whether the allegations in the complaint stated claims for relief under Federal Rule of Civil Procedure 12(b)(6) and the pleading standards of *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007). The trial court issued *Lone Pine* orders, and both sides filed expert testimony addressing whether the plaintiff met their burden to establish a prima facie case. The defendant also filed a 12(b)(6) motion to dismiss for failure to state a claim.

At the hearing on the motion to dismiss, the judge and lawyers for both sides intermingled legal arguments regarding the sufficiency of the complaints with factual arguments derived from the expert testimony and other evidence produced pursuant to *Lone Pine* orders. The judge specifically remarked that some of the environmental testing of the plaintiffs' wells came back "clean." The comingling of issues caused the Eleventh Circuit to question whether the trial court confined its analysis of the motion to dismiss to the allegations in the complaint. The court further suggested that the intermingling of factual and legal issues improperly converted the *Lone Pine* order into a "pseudo summary judgment" motion at a point in the case where the parties had not engaged in reciprocal discovery. Consequently, the court held that a court should issue a *Lone Pine* order only after determining that the claims survive a motion to dismiss.

V. TEXAS FEDERAL DISTRICT COURTS

a. Attorneys Fees in Clean Air Act Citizen Suits

In *Sierra Club v. Energy Future Holdings Corporation*, No. W-12-CV-108, 44 ELR 20205 (W.D. Tex. Aug., 29, 2014), the court ordered the Sierra Club to pay $6.4 million in attorneys fees in a Clean Air Act citizen suit it filed against Energy Future Holdings Corporation

and Luminant Generation Company LLC. The Sierra Club alleged that the defendants' coal-fired power plant violated particulate matter and opacity limits. After obtaining a partial summary judgment on the particulate matter allegations, defendants prevailed in a bench trial on opacity. The defendants then filed a motion for attorneys fees under 42 U.S.C. § 7604(d), which provides that the court may award the costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such an award is appropriate.

Applying the standard in *Christianburg Garment Co. v. E.E.O.C.*, 434 U.S. 412 (1978), the court found that the Sierra Club's claims were "frivolous, unreasonable, or groundless" and thus the defendants were entitled to an attorneys' fees award. Among the conduct found objectionable was the Sierra Club's awareness that the power plant Title V permit exempted particulate matter deviations during maintenance, startup or shutdown activities and the fact that Plaintiff persisted in keeping Energy Future Holdings as a defendant even after learning that the company had no role in the ownership or operations of the plant. Except for a conditional appellate fee of $300,000, the court also found the fee amount requested by defendants was reasonable.

b. Supplementation of the Administrative Record in Under NEPA

In *Gulf Coast Rod Reel & Gun Club, Inc. v. United States Army Corps of Engineers*, No. 3:13-CV-126, 2015 WL 1883522 (S.D. Tex. April 20, 2015), two community groups challenged the Texas General Land Office's (GLO's) plan to close Rollover Pass, a manmade channel on the Bolivar Peninsula. In 2012, the Army Corps of Engineers approved the GLO's request for a Clean Water Act Permit. The plaintiffs allege that the Corps' decision to issue a finding of no significant impact for the closure was arbitrary and capricious and that the Corps violated the National Environmental Policy Act (NEPA) and the Clean Water Act by failing to fully disclose the ecological and socioeconomic impacts of the closure.

The plaintiffs sought to supplement the administrative record and introduce extra-record evidence to aid the court in reviewing the Corps' decision. Specifically, the plaintiffs asked the court to consider a scientific article about sand transport that the plaintiffs contended was actually relied upon by the Corps, three studies by the Texas Bureau of Economic Geology that were available prior to the Corps' decision but that the Corps did not rely upon, and three expert reports about salinity and sedimentation created after the Corps' decision.

The court first distinguished between "supplementation" and "extra-record evidence." Supplementation is a claim that some information that should have been included in the administrative record was not due to a clerical error. "Extra-record evidence," is a claim that the court should consider evidence beyond the administrative record. Citing *Medina Cnty. Envtl. Action Ass'n v. Surface Transp. Bd.*, 602 F.3d 687, 706 (5th Cir. 2010), the court identified three categories of exceptions allowing the extra-record evidence to be considered in judicial review of an agency decision:

(1) The agency deliberately or negligently excluded documents that may have been adverse to its decision,
(2) The district court needed to supplement the record with "background information" in order to determine whether the agency considered all of the relevant factors, or

(3) The agency failed to explain administrative action so as to frustrate judicial review.

The court stated that the second exception can apply to a NEPA claim where the court must determine whether the agency considered all of the relevant factors.

Applying these factors to the documents at issue, the court found that the scientific article relied upon by the Corps was supplementation, and not extra-record evidence. The court therefore granted plaintiffs' motion with respect to that document. The court did not rule on the other two categories of documents. But it hinted that the Bureau of Economic Geology studies may be considered if the use of those documents is limited to the plaintiffs' NEPA claim and just an attempt to show other available information that the Corps neglected. The court indicated that it was reluctant to consider litigation-related expert reports.

a. Clean Air Act Citizen Suit

In *Environment Texas Citizen Lobby, Inc. v. ExxonMobil Corp.*, 66 F. Supp.3d 875 (S.D. Tex. 2014), Environment Texas and Sierra Club sued ExxonMobil under the citizen suit provision of the federal Clean Air Act, 42 U.S.C. § 7604. The plaintiffs sought a declaratory judgment, over $640 million in penalties, injunctive relief, and the appointment of a special master for unauthorized air emissions from ExxonMobil's Baytown complex during the period from 2005 to 2013. The district court found that no penalty or injunctive relief was appropriate. The court noted that the company's compliance history and good faith efforts to comply, the lack of any economic benefit, and the fact that the ExxonMobil had already paid $1.4 million in penalties in connection with the emission events, all weighed against additional penalties.

VI. OTHER FEDERAL DISTRICT COURTS

a. Dunes Sagebrush Lizard

In *Defenders of Wildlife v. Jewell*, No. 13-0919, 2014 WL 4829089 (D. D.C. Sept. 30, 2014), the United States District Court for the District of Columbia upheld the decision of the U.S. Fish and Wildlife Service (FWS) to withdraw a proposed rule that would have listed the dunes sagebrush lizard as an endangered species. The FWS had relied upon ongoing and future conservation efforts and new information in reaching its decision. Specifically, the FWS considered three conservation mechanisms put in place by the Bureau of Land Management, New Mexico, and Texas. Collectively, the three mechanisms covered approximately 89% of the lizard's habitat. The court concluded that the FWS properly considered the five listing factors under the Endangered Species Act and that the agency relied on the best available science in its assessment of conservation efforts. Further, the court held that because the FWS's withdrawal decision reasonably relied on the conservations plans, the decision was not arbitrary and capricious.

b. *Deepwater Horizon* Apportionment of Responsibility

The United States District Court for the Eastern District of Louisiana issued findings of fact and conclusions of law regarding phase one of the Deepwater Horizon oil spill trial. *In re Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010*, 21 F. Supp.3d 657 (E.D. La. 2014). In the 150-page opinion, the court determined that the discharge

of oil was the result of BP Exploration & Production, Inc.'s gross negligence and willful misconduct and therefore the company was subject to enhanced civil penalties under the Clean Water Act. The court found that several crucial BP decisions were "primarily driven by a desire to save time and money, rather than ensuring that the well was secure." The court also found that the drilling contractor, Transocean, and oilfield service company, Halliburton, were each liable under general maritime law. On the issue of fault, the court found BP 67% responsible, Transocean 30% responsible, and Halliburton 3% responsible. On July 2, 2015, BP agreed to settle the case with the federal government and state governments by paying $18.7 billion in penalties.

c. EPA Hazardous Air Pollutant Deadlines

In *Sierra Club v. U.S. Environmental Protection Agency*, 61 F. Supp.3d 35 (D.D.C. 2014), United States District Court for the District of Columbia held that EPA had failed to comply with a prior order requiring the agency to promulgate emissions standards for certain sources of three hazardous air pollutants under the Clean Air Act. The litigation commenced in 2001, when the Sierra Club filed a citizen suit in district court against EPA claiming that the agency had failed to meet the November 2000 statutory deadline for promulgating hazardous air pollutant standards under sections 112(c)(3), 112(k)(3)(b), and 112(c)(6) of the Act. In 2006, the district court issued an order directing EPA to promulgate the standards by December 15, 2007, which was ultimately extended to February 21, 2011.

In March of 2011, EPA issued a brief "determination notice" stating that it had fulfilled its duty to promulgate the emissions standards. In the determination, EPA provided a link to a docket it had established that contained a technical memorandum. In that memorandum, EPA described previous agency rulemakings which, according to the agency, effectively but indirectly control the relevant hazardous air pollutant emissions. The Sierra Club successfully challenged the determination in the D.C. Circuit on the basis that EPA failed to comply with notice and comment procedures in developing the document. *See Sierra Club v. Environmental Protection Agency*, 699 F.3d 530 (D.C. Cir. 2012). Back in district court, EPA argued that despite the fact that the development of the determination notice did not comply with the Administrative Procedure Act, the determination nevertheless complied with the district court's prior order. The court was unpersuaded, concluding that the order remained unsatisfied. The court directed the parties to negotiate a new deadline by which EPA would have to promulgate the emission standards in a manner reviewable by the court of appeals.

d. Challenge to Proposed Power Plant Rule

In *Nebraska v. United States Environmental Protection Agency*, No. 4:14-CV-3006, 2014 WL 4983678 (D. Neb. Oct. 6, 2014), the State of Nebraska challenged a proposed regulation to establish performance standards for greenhouse gas emissions from new fossil fuel-fired power plants. Unsurprisingly, the United States District Court for the District of Nebraska found that the proposed rule was not a final agency action for which there was no other adequate remedy at law. Noting that Nebraska's "attempt to short-circuit the administrative rulemaking process runs contrary to basic, well-understood administrative law," the court granted EPA's motion to dismiss.

e. EPA Rulemaking

In *Sierra Club v. McCarthy*, No. 13-cv-03953-SI, 2015 WL 889142 (N.D. Cal. Mar. 2, 2015), *appeal docketed*, No. 15-15894 (9th Cir. May 1, 2015), two environmental groups sued the EPA based on the agency's failure to promulgate designations for the 2010 revised primary sulfur dioxide (SO_2) national ambient air quality standard (NAAQS). EPA was required to publish air quality designations by June 2, 2013. In August 2013, EPA promulgated "nonattainment" designations for 29 areas in 16 states where three full calendar years of air quality monitoring data showed violations of the standard. EPA explained that because of the uncertainty regarding how best to characterize emissions, the agency was "not yet prepared to issue designations" for the remaining areas of the country.

After the case was filed, the plaintiffs and EPA filed a joint motion asking the court to approve and enter a proposed consent decree setting forth mandatory deadlines for EPA to issue designations for all areas of the country that remain undesignated. A number of states, including the State of Texas, objected to the proposed consent decree, arguing that where EPA has failed to promulgate air quality designations by the statutory deadline, the Clean Air Act requires EPA to issue "unclassifiable" designations for undesignated areas. The states argued that the consent decree directly contravened the statutory language allowing EPA no more than three years from the date it finalizes a new NAAQS to complete the area designation process. The court rejected this argument, noting that while the Clean Air Act specifies a deadline to act, the statute does not specify what happens in the event that EPA misses the deadline. The appropriate remedy in a deadline case is to require EPA to issue designations under a schedule, not to mandate that EPA issue any particular designation.

Two *amici*, including the Texas SO_2 Working Group, filed briefs arguing that the district court lacked jurisdiction. Specifically, they argued that EPA's decision to defer the remaining area designations for the revised SO_2 NAAQS was a final agency action that may only be challenged in the Court of Appeals for the District of Columbia Circuit. The court also rejected this argument, noting that EPA's statement regarding the deferral of designations did not represent the consummation of any agency decision-making or alter the status quo. Thus, the agency's deferral decision was not a final agency action.

f. EPA Veto of 404 Permits

In *Mingo Logan Coal Co. v. EPA*, No. 10-0541, 2014 WL 4828883 (D. D.C. Sept. 30, 2014), *appeal docketed*, No. 14-5305 (D.C. Cir. Dec. 9, 2014), Mingo Logan challenged EPA's decision to veto a permit issued to the company by the Army Corps of Engineers under section 404 of the Clean Water Act. In 2013, the United States District Court for the District of Columbia granted Mingo Logan's motion for summary judgment finding that EPA did not have the authority to act after a permit was issued. On appeal, the D.C. Circuit held that EPA did have the authority to veto a permit even after the permit was issued by the Corps and remanded the case.

On remand, Mingo Logan argued that EPA could veto the already-issued permit only upon "substantial new information" showing that the fill would have an unacceptable adverse effect. Under section 404(c), EPA may veto permitting decisions of the corps "whenever [EPA]

determines ... that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas ... wildlife, or recreational areas." The court observed that the text of section 404(c) is silent on the issue of whether EPA must have substantial new information when exercising its veto authority after a permit is issued, and noted that the use of the word "whenever" suggested a broad grant of authority that could be exercised at any time. The court also rejected Mingo Logan's argument that EPA had changed its position, citing to numerous EPA concerns with the application contained in the administrative record. Finally, Mingo Logan argued that the agency's action was arbitrary and capricious because EPA failed to demonstrate that the discharge would create an unacceptable adverse effect on wildlife, failed to consider the role of mitigation required by the permit, and improperly considered the downstream consequences of disposal. The court found that all of these issues involved disputed questions of science and that the agency's conclusions were entitled to deference.

VII. TEXAS SUPREME COURT

a. Stigma Environmental Damages

In *Houston Unlimited, Inc. Metal Processing v. Mel Acres Ranch*, 443 S.W.3d 820 (Tex. 2014), the owner of land contaminated by a neighbor sought to recover for the loss of the land's market value based on "stigma" that remained after the contamination subsided. The Plaintiff, Mel Acres Ranch, owned a 155-acre tract of undeveloped ranchland along Highway 290 in Chappell Hill, Texas. Across the highway, Houston Unlimited Inc. operated a metal processing facility. Rainwater flowed from the metal processing facility, through a culvert under the highway, and into a large stock tank on the ranch. In 2007, tests conducted by Mel Acres and TCEQ revealed the presence of arsenic, chromium, copper, nickel, and zinc exceeding state action levels in the water in the stock tank. TCEQ also documented several violations of hazardous waste regulations at Houston Unlimited.

After the TCEQ inspection, Houston Unlimited undertook actions to bring its facility into compliance including the construction of a berm to prevent runoff from flowing onto the ranch. Houston Unlimited and Mel Acres both hired environmental consultants who disagreed about whether the stock tank remained adversely affected by ongoing operations at the Houston Unlimited facility. Mel Acres sued Houston Unlimited for nuisance, trespass, and negligence. The jury found that Houston Unlimited did not commit a trespass causing permanent injury or create a permanent nuisance, but did find that Houston Unlimited' s negligence caused the ranch to lose about $350,000 in market value.

To establish its damages, the Mel Acres relied on an expert witness who testified that, in her opinion, the ranch had suffered a loss of market value due to stigma resulting from fear, risk, and negative public perceptions. According to the expert, Mel Acres would have to disclose the history of the contamination in any future sale, and the disclosure would have a negative effect on property value due to a perceived increased environmental risk. There was no dispute that Mel Acres' expert was well qualified to testify regarding market value. The issue presented to the Texas Supreme Court was whether the expert's testimony was competent evidence to establish stigma damages.

The Court declined to directly address whether a loss of market value that remains after restoration of a temporary injury may be based solely on stigma damages. Instead, the Court's inquiry focused on the evidence necessary to establish stigma. "Even where it is legally possible to recover stigma damages, it is often legally impossible to prove them." Mel Acres' expert searched the general area around Washington County and identified two properties to compare to the ranch. One property was a 48-acre tract in Grimes County that had previously been part of a larger tract owned by International Paper. The larger tract had been contaminated in the past, but the 48-acre parcel was not contaminated. The other property was part of a 337-acre tract in Waller County that had been declared a Superfund site because of contamination affecting 33 acres. The expert calculated an "unimpaired" and "impaired" valuation for each property, and found that the impaired values were 41% and 72% less than the unimpaired values, respectively. Based on those percentage decreases, she opined that Mel Acres's ranch had suffered a 60% diminution in value.

The Court identified three main problems with Mel Acres' expert's approach. First, the court noted that the underlying data that the expert relied on did not support the proposition that the properties lost market value. With respect to one property, the expert compared the owner's asking price with a verbal purchase offer, which the Court found to be an insufficient method for determining actual market price. For the other comparison property, the Court found that expert failed to adequately address evidence that the property owner, a former International Paper employee, was given a below market, "sweetheart deal" when he purchased the property.

Second, the expert failed to establish that the cause of any diminution in value of the comparison properties was, in fact, caused by environmental stigma. Specifically, the Court was concerned that the expert did not explain or consider other possible causes of the diminished property value and assumed that any diminution was 100% caused by stigma from adjacent environmental contamination.

Third, the expert failed to account for any differences between the Mel Acres ranch and the two comparison properties and the differences between the nature of the contamination of the three properties. The Court concluded by stressing that it was not holding that the dissimilarities between contaminated properties could never form the basis of expert testimony on diminution in value, only that in that case the plaintiff's expert had not provided sufficient data and had relied on unsupported assumptions.

b. Underground Trespass

Environmental Processing Systems, L.C. v. FPL Farming Ltd., 457 S.W.3d 414 (Tex. 2015) is a case involving a claim of underground trespass. FPL Farming Ltd. owned land in Liberty County, Texas, which is mainly used for rice farming. Environmental Processing Systems ("EPS") leased a five-acre tract on an adjacent property, where it constructed and operated a wastewater disposal facility. During the initial permitting of the injection well, FPL Farming's predecessor-in-title requested a contested case hearing but later settled. EPS drilled a well and began injecting wastewater in a formation 8,000 feet underground.

FPL Farming sued EPS alleging that wastewater had migrated into the deep subsurface of its land and contaminated the briny groundwater aquifer beneath. The causes of action asserted

were trespass, negligence, unjust enrichment, and injunctive relief. FPL Farming moved for a directed verdict on the basis that EPS provided no evidence to support any of the affirmative defenses it pleaded, including consent and authorization. The court denied the motion, and the jury found against FPL Farming on all counts.

The Beaumont Court of Appeals affirmed on the basis that a trespass did not occur because the injection wells were operated under state-issued permits. *FPL Farming, Ltd. v. Environmental Processing Sys., L.C.*, 305 S.W.3d 739, 741 (Tex. App. – Beaumont 2009). The Texas Supreme Court reversed on that issue, holding that a permit does not shield a party from civil tort liability resulting from the use of the permit. *FPL Farming, Ltd. v. Environmental Processing Sys., L.C.*, 351 S.W.3d 306 (Tex. 2011). On remand, the Beaumont Court of Appeals reversed the judgment on the basis that the jury charge improperly placed the burden of proving the issue of non-consent of the trespass on FPL Farming. The court held that because consent to trespass is an affirmative defense, EPS should have had the burden on that issue. The Beaumont court also affirmed the trial court's denial of FPL Farming's motion for directed verdict.

Both parties again petitioned the Texas Supreme Court to hear the case. EPS argued that deep subsurface wastewater migration could not constitute a trespass under Texas law, while FPL Farming challenged the court of appeals' decision affirming the denial of the motion for directed verdict.

The Texas Supreme Court reversed the Beaumont Court of Appeals, holding that the plaintiff has the burden to prove that the entry was wrongful, and the plaintiff must do so by establishing that entry was unauthorized or without its consent. Consent is thus not an affirmative defense to trespass, but an element of the cause of action. The Court also held that the trial court's denial of FPL Farming's motion for a directed verdict was proper because there was no evidence in the record establishing that FPL Farming did not consent to the placement of waste under its property.

In reaching this conclusion, the Court expressly did not address whether deep subsurface wastewater migration is actionable as a common law trespass in Texas. The answer to that question, first raised in the context of hydraulic fracturing in *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1 (Tex. 2008), is still unclear. Thus, a plaintiff similarly-situated to FPL Farming could raise the issue in a future case, assuming that plaintiff provides evidence establishing non-consent.

VIII. TEXAS COURTS OF APPEALS

a. Nuisance Damages From Oil and Gas Operations

Sciscoe v. Enbridge Gathering (North Texas), L.P., No. 07-13-00391-CV, 2015 WL 3463490 (Tex. App. – Amarillo June 1, 2015, no pet. h.), involves the right of individual property owners to seek redress for the diminution in property value cause by light, noise, and airborne chemicals originating from the operation of an adjacent energy production facility and the right of the government to regulate emissions from those facilities. The consolidated Tarrant County action was brought by 18 land owners and the Town of DISH.

The landowners claimed loss of market value of properties, annoyance and discomfort, injury to personal property, mental anguish, and exemplary damages. The Town of DISH asserted that the operators' activities eroded tax base and sought damages of $1,000 per day for trespass and exemplary damages under Chapter 41 of the Texas Civil Practices and Remedies Code. No party sought injunctive relief.

The defendant operators moved for summary judgment, arguing that the claims were barred because: (1) migration of odors and chemical particulates onto Appellants' properties cannot constitute a trespass as a matter of law; (2) the claims were pre-empted by Federal and Texas Clean Air Acts; (3) the claims were barred by the political question doctrine; (4) the oil and gas operators' activities cannot constitute a nuisance or trespass as a matter of law because the emissions fall within regulatory limits, and (5) the claims were barred by the 2-year limitations period. One of the operators also filed a no-evidence motion for summary judgment, arguing that DISH does not have statutory authority to file lawsuit.

The trial court granted the defendants' motions without specifying the basis of its decision. Facts asserted in the pleadings and motions are that the missions come from compressors located a quarter to a half of a mile from the Plaintiffs' homes. In 2010, the TCEQ and Department of State Health Services conducted air and tap water sampling and concluded that VOC exposure in DISH is no higher than that in general population. In January 2011, TCEQ determined that operations at the compressor station were within emissions limits.

The court of appeals reversed the trial court, concluding that the migration of odors and airborne chemical particulates can constitute a trespass. In its analysis, the court combined the compliance with governmental regulations, pre-emption, political question doctrine theories, and noted that the appellants were not seeking to alter or change emission standards, but compensation. The court held that a "regulatory compliance or licensure is not a license to damage the property interests of others." With respect to limitations, the court described the burden of establishing the accrual date of Appellants claims as "extremely difficult" due to the nature of nuisance. The court held that there are necessarily fact issues involved in determining the date when the odors become so excessive as to interfere with use and enjoyment of property.

The court confirmed that the Town of DISH, a type C general-law municipality, had authority to sue. Further, by seeking only damages and not injunctive relief, DISH was not trying to improperly regulate activities outside of its extra-territorial jurisdiction. Finally, the court concluded that the correct measure of damages for the Plaintiffs' claims was diminution in property value. Other measures of damages, including mental anguish, were not appropriate.

b. Environmental Damages to Property

In *Forest Oil Corp. v. El Rucio Land & Cattle Company*, 446 S.W.3d 58 (Tex. App. – Houston [1st Dist.], 2014, pet. filed), Forest Oil, held a mineral lease covering 1,400 acres of the 27,000-acre McAllen Ranch in Hidalgo County. In 2005, James McAllen and three entities owning the ranch sued Forest Oil to recover alleged environmental damages to the property. The McAllens alleged that Forest Oil had deposited hazardous materials on the Ranch and contaminated its soil and groundwater. In addition, the McAllens claimed that Forest Oil had donated oilfield drilling pipe contaminated with naturally occurring radioactive material, or

"NORM," for the construction of pens to hold rhinoceroses at another ranch owned by the McAllen family. Mr. McAllen claimed that his exposure to the NORM while working on the rhinoceros pens had caused him to develop cancer in his leg, ultimately requiring amputation.

Forest Oil moved to compel arbitration of the McAllen's environmental claims based on a 1999 settlement agreement and on a surface agreement. Ultimately, the dispute regarding arbitration was resolved by the Texas Supreme Court, which sided with Forest Oil in *Forest Oil Corp. v. McAllen*, 268 S.W.3d 51, 61 (Tex. 2008). The case proceeded to arbitration, where the hearing before the arbitration panel lasted 17 days. The arbitration panel awarded $15 million in damages to the business entities that owned the ranch, $500,000 to Mr. McAllen, $500,000 in exemplary damages, and declaratory judgment that Forest Oil has a continuing obligation to remediate the ranch. The arbitrators also awarded approximately $5 million in attorneys fees.

The McAllens filed a motion to confirm the award in the trial court. Forest Oil filed a motion to vacate the award. Following a hearing, the trial court confirmed the arbitration award and awarded the McAllens $6.7 million in attorneys fees. Forest Oil appealed and asserted, among other arguments, that the arbitration award was improper because only the Railroad Commission had exclusive or primary jurisdiction over the dispute.

The court of appeals addressed this argument by first distinguishing between exclusive and primary jurisdiction. The court reasoned that if the Railroad Commission had exclusive jurisdiction then not only would the arbitration panel have lacked subject-matter jurisdiction to make the award, but the trial court would have lacked jurisdiction to render judgment.

To determine whether the Railroad Commission had exclusive jurisdiction, the court looked to provisions of the Texas Water Code, Natural Resources Code, and Health and Safety Code authorizing the agency to act. The court agreed that these statutes showed that the legislature has chosen the Railroad Commission as the state agency that solely makes and enforces environmental regulations related to oilfield operations "vis a vis other state administrative agencies," but disagreed with Forest Oil that anything in the Railroad Commission's authorizing statutes prohibits a landowner from suing a polluter under established common-law causes of action to obtain established common-law remedies. Because there is law, besides the Railroad Commission's regulations, under which a property owner may seek redress for environmental contamination caused by oil and gas development, the court concluded that the Railroad Commission does not have exclusive jurisdiction.

The court also rejected Forest Oil's alternative argument that the Railroad Commission has primary jurisdiction over issues pertaining to environmental damage. The court noted that the plaintiff's causes of action did not derive from Forest Oil's non-compliance with Railroad Commission rules and regulations, but from common law claims that exist independent of the agency's regulatory scheme. "Simply because the Railroad Commission might have jurisdiction to determine some facts related to a controversy does not oust a court ... of jurisdiction to make the underlying factual determination." In addition to finding that the arbitration panel had jurisdiction award, the court rejected Forest Oil's other arguments, which all related to alleged impropriety on the part of the arbitrators. The court of appeals thus affirmed the trial court's confirmation of the arbitration panel award.

c. TCEQ Drought Rules

In *Texas Commission on Environmental Quality v. Texas Farm Bureau*, 3460 S.W.3d 264 (Tex. App. – Corpus Christi 2015, pet. filed), the Texas Farm Bureau and individual plaintiffs brought a declaratory judgment action challenging the validity of TCEQ's drought rules. After the trial court declared the drought rules invalid, TCEQ appealed.

TCEQ adopted its drought rules in April 2012, following the legislature's enactment of section 11.053 of the Texas Water Code. That section provides in relevant part that during droughts, "the executive director by order may, in accordance with the priority of water rights established by Section 11.027" temporarily suspend water rights or temporarily adjust the diversions of water rights holders. In ordering a suspension or adjustment, the executive director "shall ensure that an action taken ... to the greatest extent practicable, conforms to the order or preferences established by Section 11.024." Section 11.027 states that "[a]s between appropriators, the first in time is the first in right," and Section 11.024 prioritizes water users based on the nature of use. Pursuant to its authority under section 11.053, TCEQ adopted the drought rules which state that "the executive director may determine not to suspend a junior water right based on public health, safety, and welfare concerns...." 30 TEX. ADMIN. CODE § 36.5(c).

TCEQ first applied the drought rules in the Brazos River Basin in late 2012 and early 2013. Dow Chemical Company, holder of senior water rights in the lower Brazos, notified TCEQ that it was making a "senior call." In response, TCEQ's executive director issued a series of orders suspending the use of water rights with a priority date junior to Dow's priority date. But, citing the agency's drought rules, the executive director elected not to suspend the use of certain water rights designated for use as municipal water supplies or for electric power generation based on public health, safety and welfare concerns. The TCEQ then modified the executive director's orders by requiring the junior water rights holders who were not suspended to provide TCEQ with additional information related to their water use and conservation efforts.

On appeal, the TCEQ argued that the district court misinterpreted section 11.053 of the Texas Water Code. Specifically, TCEQ asserted that the district court failed to give proper deference to the agency's interpretation of the statute and that the court's interpretation was unreasonable and rendered the provision meaningless. The court of appeals first held that because section 11.053 unambiguously requires that any actions taken be taken in accordance with the time priority of section 11.027, the agency was not entitled to deference. "A plain reading of the statute indicates that the Legislature intended for the priority system established under section 11.027 to take precedence in any type of suspension or adjustment." The court was likewise not persuaded that the legal and practical effect of the district court's interpretation was to nullify section 11.053, noting that other provisions of the Water Code allow TCEQ to divert water to meet urgent public health and safety needs.

TCEQ also argued that its police powers and general authority to protect the public health, safety, or welfare supported the agency's drought rules. But the court held that no constitutional or statutory provisions cited by TCEQ give the agency the general authority to suspend water rights after they have been issued. Absent express authority on the issue, the

agency's police power and general authority do not allow it to override the unambiguous language of section 11.053.

d. Affected Persons

In two cases, *Sierra Club v. Texas Commission on Environmental Quality*, 455 S.W.3d 214 (Tex. App. – Austin, pet. filed) and *Texas Commission on Environmental Quality v. Sierra Club*, 455 S.W.3d 228 (Tex. App. – Austin, pet. filed), the Austin Court of Appeals applied *TCEQ v. City of Waco*, 413 S.W.3d 409 (Tex. 2013), to uphold the TCEQ's decision to deny contested case hearing requests. Both cases involved permit applications by Waste Control Specialists, LLC ("WCS") for its radioactive waste disposal facility in Andrews County.

The Sierra Club, among others, timely submitted written comments to the draft licenses for both applications that raised concerns regarding the site characterization, the groundwater monitoring plans, and the impact of high winds. The Sierra Club also filed a request for a contested case hearing with the TCEQ in both cases, asserting that two of its members who live in Eunice, New Mexico and rely on water wells in the area would be affected by the issuance of the licenses. The TCEQ commissioners voted to deny Sierra Club's request for a contested case hearing because its members were not "affected persons" and grant the license to WCS.

The Sierra Club appealed both the orders to Travis County District Court. The cases presented almost identical factual legal issues, namely, whether the two Sierra Club members were "affected persons" entitled to a contested case hearing. The Austin Court of Appeals held that it was within TCEQ's discretion to determine that the Sierra Club's members were not "affected persons," and that the TCEQ was not required to refer the affected person issue for its own contested case hearing.

IX. OTHER COURTS

a. *Lone Pine* Orders in Hydraulic Fracturing Litigation

In *Antero Resources Corp. v. Strudley*, 347 P.3d 149 (Colo. 2015), the Colorado Supreme Court held that under Colorado law a trial court cannot issue a *Lone Pine* order requiring a plaintiff to present prima facie evidence in support of a claim before the plaintiff may fully engage in discovery. The plaintiffs in the case alleged physical injury and property damage caused by nearby natural gas exploration activities, including hydraulic fracturing. Sixteen national trade associations filed amicus briefs in the case. The case attracted nationwide attention due to the nature of the allegations and the potential for the case to be used as persuasive authority in similar litigation in other states.

That's it in a nutshell (Caselaw Update)

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ATTORNEYS AND COUNSELORS

Highlights since last August

- Administrative Rules and Challenges
- Substantive Federal Air, Water, and Waste
- Texas Cases

Agency Interpretative Rules

- *Perez v. Mortgage Bankers Association*, 135 S. Ct. 1199 (2015).
  - **Issue:** Do federal agencies have to go through notice and comment to change an interpretative rule?
  - **Holding:** No.

Challenging a Proposed Regulation

- *Murray Energy v. EPA*, No. 14-112, 2015 WL 3555931 (D.C. Cir. June 9, 2015).
- *Nebraska v. EPA*, No. 4:14-CV-3006, 2014 WL 4983678 (D. Neb. Oct. 6, 2014).
  - **Issue:** Can a party obtain judicial review of a proposed EPA rule?
  - **Holding:** No.

Judicial Review of Agency Action

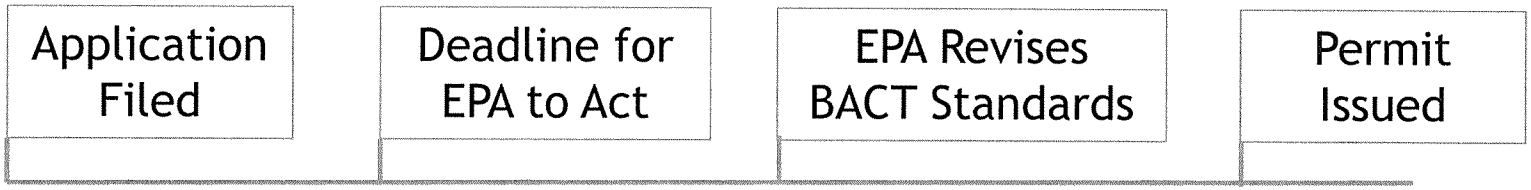
- *Shell Gulf of Mexico, Inc. v. Center for Biological Diversity*, 771 F.3d 632 (9th Cir. 2014).
  - **Issue:** Can a beneficiary of an agency action preemptively sue other private parties that may challenge the validity of that action?
  - **Holding:** No.

Mercury Air Toxics Rule

- *Michigan v. EPA*, No. 14-46, 2015 WL 2473453 (June 29, 2015).
  - **Issue:** Did EPA have to consider costs when deciding whether to regulate power plants under the NESHAPs program?
  - **Holding:** Yes.

Timing of CAA Permit Decisions

- *Sierra Club v. EPA*, 762 F.3d 971 (9th Cir. 2014).
  - **Issue:** When EPA fails to act on a permit application within a statutory deadline and then the applicable standards change, can EPA grandfather the permit under the old standards?
  - **Holding:** No.



JDs as Reviewable Agency Actions

- *Belle Co. v. United States Army Corps of Engineers*, 761 F.3d 383 (5th Cir. 2014).
  - **Issue:** Is a wetlands jurisdictional determination a reviewable final agency action post-*Sackett*?
  - **Holding:** No.

EPA Veto of CWA § 404 Permits

- *Mingo Logan Coal Co. v. EPA*, No. 10-0541, 2014 WL 4828883 (D. D.C. Sept. 30, 2014), *appeal docketed*, No. 14-5305 (D.C. Cir. Dec. 9, 2014).
  - **Issue:** When vetoing an already-issued permit, must EPA rely on substantial new information?
  - **Holding:** No.

Arranger Liability

- *Vine Street LLC v. Borg Warner Corp.*, 776 F.3d 312 (5th Cir. 2015).
  - **Issue:** Is a party who sells equipment with the knowledge, but not intent, that a hazardous substance will be released through the use of the equipment, an arranger under CERCLA or the TSWDA?
  - **Holding:** No.

Stigma Environmental Damages

- *Houston Unlimited, Inc. Metal Processing v. Mel Acres Ranch*, 443 S.W.3d 820 (Tex. 2014).
  - **Issue:** Did the Plaintiff's expert provide competent testimony on diminution in value resulting from environmental stigma?
  - **Holding:** No.
  - **Issue Avoided:** Whether environmental stigma damages are recoverable under Texas law.

Stigma Environmental Damages



"It's not the social stigma. It's the mercury."

Underground Trespass

- *Environmental Processing Systems, L.C. v. FPL Farming Ltd.*, 457 S.W.3d 414 (Tex. 2015).
  - **Issue:** Is non-consent an element of the cause of action for trespass?
  - **Holding:** Yes.
  - **Issue Avoided:** Whether underground injection may constitute a trespass.

TCEQ Drought Rules

- *Texas Commission on Environmental Quality v. Texas Farm Bureau*, 3460 S.W.3d 264 (Tex. App. – Corpus Christi 2015, pet. filed).
  - **Issue:** Does TCEQ have the authority to not suspend a junior water right based on public health, safety, and welfare concerns?
  - **Holding:** No.

Nuisance Damages from Oil and Gas Operations

- *Sciscoe v. Enbridge Gathering (North Texas), L.P.*, No. 07-13-00391-CV, 2015 WL 3463490 (Tex. App. – Amarillo June 1, 2015, no pet. h.).
  - **Issue:** May property owners seek nuisance and trespass damages for light, noise, and airborne chemicals from energy production facilities?
  - **Holding:** Yes.

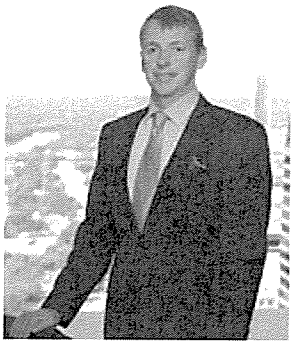
Surface Damages from Oil and Gas Operations

- *Forest Oil Corp. v. El Rucio Land & Cattle Company*, 446 S.W.3d 58 (Tex. App. – Houston [1st Dist.], 2014, pet. filed).
  - **Issue:** Does the Railroad Commission have exclusive jurisdiction over environmental damages resulting from oil and gas operations?
  - **Holding:** No.

That's it in a nutshell (Caselaw Update)

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PROFILE

Chris Smith focuses his practice on environmental enforcement and administrative litigation. Particular areas of expertise include wetlands enforcement actions under § 404 of the Federal Clean Water Act (CWA), Endangered Species Act (ESA) enforcement actions, Texas and Federal Clean Air Act (CAA) enforcement cases and citizen suits, and property and groundwater contamination litigation.

Chris' administrative practice involves contested cases before the Texas State Office of Administrative Hearings (SOAH), Texas Commission on Environmental Quality (TCEQ) permitting matters, Railroad Commission of Texas enforcement proceedings, Public Utility Commission of Texas (PUCT) transmission line siting cases, Texas Department of Insurance enforcement actions, Texas Department of Motor Vehicle franchise disputes, Texas Alcoholic Beverage Commission (TABC) enforcement cases, and issues related to the Texas Public Information Act.

Chris also counsels clients on litigation avoidance and environmental due diligence in corporate transactions, including the use of the Texas Environmental, Health, and Safety Audit Privilege Act and the U.S. EPA's Audit Policy to limit potential liability. He also assists clients in conducting internal investigations and audits. In addition to his environmental and administrative practice, Chris represents clients in connection with commercial disputes and state and federal civil litigation.

EXPERIENCE

- Advised unconventional natural gas exploration and production (E&P) companies on emerging environmental issues related to shale gas in the Bakken, Barnett, Eagle Ford, Fayetteville, Haynesville, and Marcellus shale plays, including wetlands permitting and enforcement in connection with the construction of wells and pipelines, endangered species, hydraulic fracturing, water supply issues, and air regulations in connection with natural gas processing facilities
- Assisted in legislative effort to pass the Texas Property Assessed Clean Energy (PACE) Act, which provides an innovative financing program to allow owners of commercial and industrial properties to obtain low-cost, long-term loans for water conservation, energy-efficiency improvements, and renewable retrofits
- Assisted E&P company in-house counsel in conducting internal investigation related to alleged violations of the ESA by company contractors and defended company in threatened prosecution alleging criminal violations of the ESA
- Regularly advised publicly traded E&P and oil field service companies regarding hydraulic fracturing, climate change, and water issues as they pertain to U.S. Securities and Exchange (SEC) filings and required disclosures

- Defended refinery in a TCEQ enforcement action alleging violations of regulations promulgated under Title V of the CAA and the Texas State Implementation Plan (SIP); specific tasks included assessing potential exposure, negotiating with the TCEQ, and working with the client to develop a long-term plan to achieve compliance
- Represented multiple land owners in SOAH contested cases related to the siting of electrical transmission lines before the PUCT and in appeals in Texas state courts; specific issues addressed included the extent to which the route preferred by the utility and alternative routes complied with PUCT statutory and regulatory routing criteria
- Represented a major manufacturing facility in a TCEQ enforcement action under the Texas Solid Waste Disposal Act and an EPA investigation under the Resource Conservation and Recovery Act (RCRA) and the Emergency Planning and Community Right to Know Act (EPCRA)
- Represented chemical pipeline company in a lawsuit brought by more than 300 individuals alleging personal injury damages related to a pipeline explosion
- Advised purchaser of a Texas Retail Electric Provider (REP) on compliance with respect to PUCT REP regulations and the transfer of an REP certificate
- Counseled health care client in conducting environmental audit and developing an air regulations compliance plan for emergency generators located in a CAA nonattainment area
- Defended restaurant holding a liquor license in a TABC enforcement action seeking the revocation of license
- Represented a developer-owned water utility in decertification contested case hearing before SOAH and TCEQ, as well as a subsequent appeal in Texas state court
- Assisted nonprofit organization in negotiation with the U.S. Fish and Wildlife Service related to the establishment of a safe harbor agreement and conservation easement bank under the ESA
- Represented a client in challenging EPA's interpretation of the Toxic Substances Control Act (TSCA) before the U.S. Court of Appeals for the District of Columbia Circuit
- Counseled clients regarding property remediation under the Texas Voluntary Cleanup Program (VCP) and Texas Dry Cleaner Remediation Program (DCRP)

DISTINCTIONS/HONORS

- *Texas Rising Stars*® by Thomson Reuters (Environmental); 2013-2015
- "Recommended Attorney," *The Legal 500 US* by Legalese (Industry Focus: Energy: Regulatory); 2015

ACTIVITIES (MEMBERSHIPS/AFFILIATIONS)

- Member, American Bar Association; Environment, Energy, and Resources Law Section
- Member, State Bar of Texas; Environmental and Natural Resources Law Section
- Member, Texas Young Lawyers Association
- Member, Austin Bar Association; Publications Committee of the Environmental, Natural Resources, and Water Law Section

EDUCATION

- J.D., 2005, with honors, The University of Texas School of Law
- Master of Public Affairs, 2005, Lyndon B. Johnson School of Public Affairs
- B.S., Biology, 1999, with honors, University of Maryland
- B.A., Government, 1999, *cum laude*, University of Maryland; Phi Beta Kappa

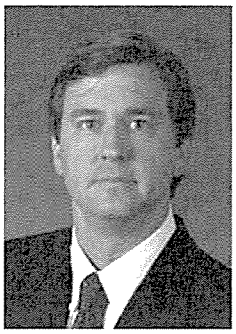
Ashley Morgan is the Senior Legislative Advisor for Governor Greg Abbott, bringing years of experience in politics and state government to the administration. At the outset of her career, she served as a staffer for several members of the Texas Legislature, including Senate and House leadership. Before joining Governor's Abbott's administration, Ashley led the Public Information & Assistance Division in the Office of the Attorney General (OAG). Prior to her work at the OAG, she served in Governor Rick Perry's Appointments Office and as primary attorney and special counsel for Commissioner Buddy Garcia at the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ).

Ashley earned her undergraduate degree from Stephen F. Austin State University and her law degree from the University of Texas School of Law. An East Texas native, she married her high school sweetheart, and they currently live in Williamson County

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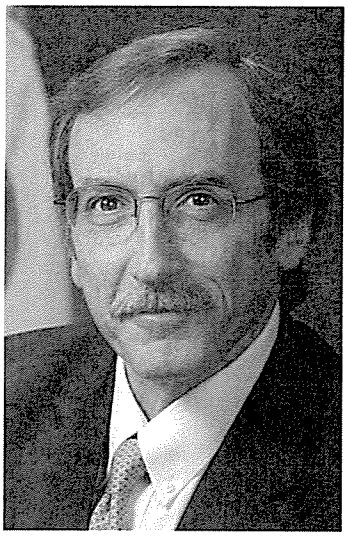


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Peter Gregg's legal career has been devoted to the practice of environmental law. His practice includes a focus on environmental issues involving waste management and contaminated properties, including state and federal CERCLA matters, RCRA corrective action and compliance counseling, transactions involving contaminated properties, and counseling on state and federal regulatory cleanup programs. He also represents clients on all manner of air, water, waste management, and water and wastewater utility regulatory issues (permitting, enforcement, and general compliance matters).

Mr. Gregg began his career at the Texas Commission on Environmental Quality (TCEQ), where he provided program development and legal/litigation support for various air, water quality, and industrial and hazardous waste programs. He spent several years as in-house environmental counsel at international energy company El Paso Corporation prior to returning to private practice in Austin in 2008 as a partner in a national environmental law firm. During his years in private practice, he has represented national and international clients within the chemical, petroleum refining, and natural gas production, processing and transportation industries, among others, as well as various local and regional manufacturing and utility interests.

Mr. Gregg is a former Chair of the Texas Bar's Environmental and Natural Resources Law Section and a former Chair of the Houston Bar Association's Environmental Law Section. He is listed in *The Best Lawyers in America* in the specialties of Environmental Law and Litigation-Environmental and has been distinguished as a "Super Lawyer" in Environmental/Land Use Law by *Texas Monthly* and *Law & Politics* Magazine. He is AV Peer Review Rated.



Lawrence E. Starfield

Principal Deputy Assistant Administrator

EPA Office of Enforcement and Compliance Assurance

Larry Starfield is the Principal Deputy Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance (OECA) in Washington, DC. OECA's mission is to improve the environment and protect public health by ensuring compliance with the nation's environmental laws. Mr. Starfield serves as the senior career official for OECA responsible for managing the day to day operations of the nation's environmental enforcement program, with approximately 3,000 environmental professionals and an annual budget of more than $550 million.

Mr. Starfield has more than thirty years of experience in the environmental field. From 2001 to 2011, he served as the Deputy Regional Administrator for the U.S. Environmental Protection Agency, Region 6, where he was responsible for the management of the 850-person regional office in Dallas, Texas. During his tenure, the Region oversaw issues under all environmental statutes, including those arising in response to the Shuttle Columbia disaster, Hurricane Katrina, and the Deepwater Horizon spill in the Gulf of Mexico.

From 1997-2001, Mr. Starfield served as the Regional Counsel for Region 6 where he managed an office of 60 lawyers that provided legal advice to the Regional Administrator and Region 6 program offices regarding the interpretation and implementation of federal environmental laws. Before joining Region 6, Mr. Starfield spent ten years with EPA's Office of General Counsel in Washington, D.C., where he served as an attorney-advisor, Assistant General Counsel for RCRA, and Acting Associate General Counsel for Solid Waste and Emergency Response.

Before coming to EPA, he worked in Paris, France, from 1985 to 1987 as the correspondent for the *Bureau of National Affairs* on French environmental issues. From 1981 through 1985, he was an Associate with the law firm of Skadden Arps Slate Meagher & Flom, in Washington, D.C., where he worked on environmental and energy issues. Prior to that, he clerked for Judge Walter K. Stapleton in the U.S. District Court in Wilmington, Delaware.

He is a graduate of Wesleyan University in Connecticut, and Yale Law School.

"THE MIND IS A TERRIBLE THING TO WASTE"

SOLID AND HAZARDOUS WASTE ISSUES

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"THE MIND IS A TERRIBLE THING TO WASTE"
SOLID AND HAZARDOUS WASTE ISSUES

I. RCRA ISSUES: *"Nothing to Sneeze At"*

A. **Post Closure Care (PCC) Guidance**: *"What Goes Around Comes Around"*

1. The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) released a position paper[1] in 2012 asking EPA to issue guidance to address whether PCC periods should be adjusted when permits are renewed, and if so, what criteria should be used for making that determination and what length extension is appropriate.

2. The EPA Office of Inspector General (OIG) conducted a performance audit[2] related to long-term care of disposed hazardous waste from April 2014 to March 2015.

   a. Over 1,500 units are closed with waste in place across the nation.

   b. OIG found challenges remain, including:

      (i) EPA has not finalized its PCC guidance and did not meet its commitment to issue the guidance in 2013.

      (ii) Eighteen states do not have environmental covenant statutes that strengthen controls for long-term protection of land use by restricting land use, including Texas.

      (iii) EPA and state hazardous waste programs will have an increased workload as more units reach the end of the initial 30-year PCC periods.

   c. States have been using a variety of approaches to mitigate risks from units closed with waste in place, including adopting environmental covenant statutes that allow for perpetual restriction of land use.

3. EPA issued PCC draft guidance (Draft Guidance)[3] for public review on April 29, 2015.

   a. Post-closure care ("PCC") requirements apply to land disposal units that leave hazardous waste in place after closure such as landfills, land treatment units, surface impoundments, and waste piles.

---

[1] http://astswmo.org/Files/Policies_and_Publications/Hazardous_Waste/2012-10-15-Subtitle_C_Post-Closure_Care_Position_Paper-Final.pdf
[2] http://www.epa.gov/oig/reports/2015/20150617-15-P-0169.pdf
[3] http://www.epa.gov/epawaste/hazard/tsd/td/ldu/pdf/post_closr_gd.pdf

(i) Primarily, PCC requirements include monitoring and reporting, and maintaining waste containment systems. *See* 40 C.F.R. §§ 264.117, 265.117.

(ii) PCC requirements begin after completion of closure of the unit and continue for 30 years thereafter.

(iii) Regulations in 40 C.F.R. Part 264 Subpart G contain general PCC requirements for permitted facilities. Regulations in 40 C.F.R. Part 265 Subpart G contain similar requirements for interim status facilities.

(iv) Other requirements apply to specific types of units.

(a) Tank Systems (40 C.F.R. §§ 264.197, 265.197)

(b) Surface Impoundments (40 C.F.R. §§ 264.228, 265.228)

(c) Waste Piles (40 C.F.R. §§ 264.258, 265.258)

(d) Land Treatment Units (40 C.F.R. §§ 264.280, 265.280)

(e) Landfills (40 C.F.R. §§ 264.310, 265.310)

(f) Miscellaneous Units (40 C.F.R. §§ 264.603, 265.603)

(g) Containment Buildings (40 C.F.R. §§ 264.1102, 265.1102)

(h) Hazardous Waste Munitions and Explosives Storage (40 C.F.R. §§ 264.1202, 265.1202)

(v) Financial assurance requirements also apply during the PCC period. *See* 40 C.F.R. Part 264 Subpart H and Part 265 Subpart H.

b. RCRA regulations for PCC of hazardous waste disposal units were established 33 years ago. Many facilities around the country are approaching the end of the initial 30-year PCC period established in their RCRA permits or PCC plans. *See* 40 CFR §§ 264.117, 265.117 (establishing a 30-year PCC period). Regulations do not specify factors to consider in determining whether to adjust the PCC period.

4. The Draft Guidance is intended to "assist regulators in determining whether the post-closure care periods for hazardous waste disposal facilities under Subtitle C of RCRA should be adjusted." Draft Guidance at 2.

   a. The Draft Guidance is meant to supplement EPA's existing PCC guidance.

   b. State programs may be broader in scope or more stringent than EPA's RCRA hazardous waste regulations.

   c. Adjustment could mean extending or shortening the PCC period. A 30-year period is not necessarily sufficient to eliminate potential threats to human health and the environment in all cases. *See* Draft Guidance at 2; 40 C.F.R. §§ 264.117(a)(2), 265.117(a)(2).

5. EPA asserts that RCRA PCC regulations provide discretionary authority for a permit authority to undertake a case-by-case review to lengthen the PCC period "where the record supports a determination that the revised post-closure period will protect human health and the environment." Draft Guidance at 2.

   a. In Appendix A of the Draft Guidance, EPA outlines federal regulatory provisions for PCC.

   b. EPA cites to regulatory preambles in the development of the RCRA program to support its discretionary authority. *See* 45 Fed.Reg. 33,197 (May 19, 1980); 47 Fed.Reg. 32,287-88 (July 26, 1982); 46 Fed.Reg. 2,819 (Jan. 12, 1981).

6. EPA states that the facility owner or operator is responsible for providing the information necessary to support an adjustment to the PCC period and that a facility has a duty to provide information to a permitting authority. Draft Guidance at 7, citing 40 C.F.R. § 270.30(h). *A lack of relevant and complete information may justify a conclusion by the regulatory authority that extension of the PCC period is necessary to protect human health and the environment.* Draft Guidance at 7.

7. The Draft Guidance recommends criteria for consideration in making decisions to adjust the PCC period. For each of the following criterion, EPA provides a series of questions to evaluate units approaching the end of the PCC period.

   a. Presence of hazardous waste

   b. Nature of hazardous wastes remaining in the unit

   c. Type of unit

d. Leachate

e. Groundwater

f. Siting and site geology/hydrogeology

g. Facility history

h. Landfill gas collection system integrity

i. Integrity of cover system

j. Long-term care

8. The Draft Guidance sets forth a recommended process for preparing to evaluate the PCC period in a timely fashion.

   a. The Draft Guidance recommends that the regulator examine relevant information well in advance of the end of the 30-year period.

   b. Relevant information may include:

      (i) PCC Plans

      (ii) Monitoring results

      (iii) Results from testing and inspection of cover systems

      (iv) Information concerning land use and institutional controls, etc.

   c. The Regional Administrator or State Director has the responsibility for deciding whether to end, extend, or shorten the PCC period.

9. Process For Modifying the PCC

   a. The process for making changes related to the PCC period and attendant requirements is by modifying the PCC plan through a permit modification. Permit modification procedures are set forth in 40 C.F.R. § 270.41 and include provisions for public involvement. Class 1, Class 2 and Class 3 permit modifications are classified in Appendix I to 40 C.F.R. § 270.42. Extension of the PCC period is a Class 2 modification; reduction of PCC period is a Class 3 modification. *See id.*

   b. The permitting authority or the owner or operator can request modifications to the post-closure plan. *See* 40 C.F.R. §§

264.118(d)(1), (d)(2), 264.118(d)(4), 265.118(d)(4); 30 Tex. Admin. Code § 305.62(e).

10. EPA extended the public comment period on the Draft Guidance until July 31, 2015 and specifically requested comments from operating treatment, storage or disposal facilities, permit writers, trade associations, and environmental groups.[4]

    a. Comments should be submitted to rcra.hw.pcc@epa.gov

    b. In response to the OIG report, EPA committed to issue final guidance by the end of calendar year 2015.

11. TCEQ Forecast. TCEQ reviews requests to end PCC requirements on a case-by-case basis. Demonstrations should include detailed information about all aspects of site monitoring during the PCC period, and a sound basis upon which the agency could conclude that either a reduced level of monitoring is appropriate, or that monitoring and other PCC requirements should no longer apply. TCEQ has an internal guidance document related to PCC currently under development.

B. **CCS Storage in Class VI Wells:** *"Just Thought I'd Throw that In"*

1. Key Issue: Whether supercritical compressed carbon dioxide (CO_2) fluids from carbon capture and storage (CCS) are a solid waste subject to RCRA regulation.

2. Background: Class VI Wells and Geologic Sequestration

    a. EPA created this new class of wells in 2010 for carbon capture and storage operations involving the geologic sequestration of carbon dioxide. *See* 75 Fed. Reg. 77,230 (December 10, 2010).

    b. The Class VI well exists strictly "for underground injection of carbon dioxide for the purpose of geologic sequestration." *Id.*

    c. Class VI wells cannot receive "any carbon dioxide stream that meets the definition of a hazardous waste under" RCRA and its associated regulations. *Id.* at 77,231.

    d. EPA did not answer the question whether geologically sequestered carbon dioxide streams are either solid or hazardous waste. Instead, the agency stated only that the Class VI rule "does not itself change applicable RCRA regulations." *Id.* at 77,260.

[4] http://www.epa.gov/epawaste/hazard/tsd/td/ldu/financial/hwclose.htm

3. In 2014, EPA promulgated a rule conditionally excluding CO_2 streams geologically sequestered in a Class VI well from classification as hazardous waste. *See* Hazardous Waste Management System: Conditional Exclusion for Carbon Dioxide (CO_2) Streams in Geologic Sequestration Activities, 79 Fed. Reg. 350 (Jan. 3, 2014).

   a. EPA granted a conditional exclusion from the definition of "hazardous waste" for CCS CO_2 streams when generators and injectors meet certain requirements. The rule only applies to streams injected into Class VI wells for purpose of geologic sequestration. 40 C.F.R. § 261.4(h). To qualify for the exclusion, the following conditions be met:

      (i) Transportation of the CO_2 stream must be in compliance with relevant Department of Transportation pipeline safety laws and regulations;

      (ii) Injection of the CO_2 stream must be in compliance with Class VI injection rules;

      (iii) No hazardous wastes shall be mixed with, or otherwise co-injected with the CO_2 stream; and

      (iv) The CO_2 stream generator and the Class VI UIC well owner or operator must certify compliance with these requirements. *See* 79 Fed.Reg. at 355-57; 40 CFR § 261.4(h).

   b. Whether a waste should be exempted from hazardous waste regulation "turns upon [EPA's] assessment of whether such regulation is necessary to protect human health and the environment." *See Military Toxics Project v. EPA*, 146 F.3d 948, 958 (D.C. Cir. 1998) (upholding the authority to grant conditional exclusions); 42 U.S.C. § 6922(a) (providing for certification under waiver rule to avoid monitoring, tracking, testing and other waste management measures).

   c. CCS CO_2 streams are considered by EPA to be a RCRA solid waste; such streams become solid waste once the decision is made that a supercritical CO_2 stream will be sent to a Class VI well for discard. *See* 76 Fed.Reg. 48,073, 48,077-48,078 (Aug. 8, 2011); 79 Fed.Reg 355 (Jan. 3, 2014).

      (i) RCRA defines "solid waste" as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained

gaseous material resulting from industrial, commercial, mining, and agricultural operations..." 42 U.S.C. § 6903(27).

(ii) EPA determined that "supercritical fluids" which are neither liquids nor gases but have properties of each were similar to the physical states listed in the statute. 79 Fed.Reg at 354-55.

(iii) EPA concluded that CCS streams are "discarded" as soon as they are injected into Class VI wells. *Id.*

4. EPA maintains that the exclusion is voluntary and need not be employed where no hazardous waste is involved. In addition, the rule does not affect CO_2 injected into UIC Class II enhanced oil recovery (EOR) wells, which the agency believes should be used for the purpose of EOR, not generally a waste management activity. *See* EPA's explanations to Frequent Questions.[5] EPA has also confirmed in an explanatory memorandum[6] that Class II wells permitted for the purpose of oil or gas-related recovery can continue to store CO_2.

5. The CCS Waiver Rule was challenged in *Carbon Sequestration Council, et al. v. EPA*, No. 14-1046 (D.C.Cir. June 2, 2015).

a. Industry petitioners sought to vacate EPA's determination that supercritical CO_2 injected for CCS activities is a "solid waste" under RCRA 42 U.S.C. § 6903(27).

b. Industry petitioners' arguments

(i) CO_2 streams are stored, and have yet to be discarded.

(ii) CCS facilities may be considered a "staging point" for future sale for use in EOR operations and other activities.

(iii) The rule would hinder EOR operations and other types of CO_2 injection that do not use Class VI permits.

(iv) CCS facilities would be required to incur costs to determine whether CO_2 streams are hazardous.

(v) By considering CO_2 CCS streams solid waste, the rule would impose new regulatory burdens and liability concerns, such as testing for a hazardous waste determination.

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[5] http://www.epa.gov/epawaste/nonhaz/industrial/geo-sequester/faqs.htm

[6] http://water.epa.gov/type/groundwater/uic/class6/upload/class2eorclass6memo.pdf

c. EPA arguments

(i) The statutory list defining "solid waste" is illustrative, not exhaustive and supercritical fluids are similar to the physical states expressly included. *See* 79 Fed.Reg. at 354-55; Op. at 11.

(ii) Supercritical fluids are reasonably determined to be discarded given the ordinary meaning of "discarded" This interpretation is consistent with the meaning of discarded for sludge extracted from mining wastewater.

(a) *American Mining Congress v. EPA* (*AMC I*), 824 F.2d 1177 (D.C. Cir. 1987) (holding that solid waste is limited to materials that have been discarded by virtue of being disposed of, abandoned, or thrown away).

(b) *AMC II*, 907 F.2d 1179 (DC Dir. 1990) (concluding that potential for reuse does not present EPA from classifying material as discarded).

d. Without reaching the merits of the case, the D.C. Circuit rejected the Petitioners' suit for lack of injury sufficient to satisfy standing requirements.

(i) Southern Company Services, Inc. (SCS), a member of the Carbon Sequestration Council, and Occidental Oil and Gas, a member of the American Petroleum Institute, petitioned for review, asserting representational standing.

(ii) Neither SCS nor Occidental operated or planned to operate Class VI wells, and neither was regulated by the 2014 rule. Op. at 14.

(iii) There was no evidence in the record showing that the petitioners were regulated or otherwise injured by EPA's solid waste determination. *Id.* at 17. SCS activities were not covered by EPA's decision that pertained only to injection into Class VI wells.

(a) Capturing CO_2 for use in EOR and "other commercial uses" did not show that SCS operated Class VI wells. *Id.*

(b) Similarly, the court concluded that capturing CO_2 for injection into Class V experimental wells in connection with geologic sequestration

demonstration projects did not evidence regulation by the rule. *Id.* at 17-18.

(iv) The Court found no evidence in record to support SCS' claim that "[u]nder the final rule, it will be necessary for *anyone who captures carbon dioxide streams from an emission source* to determine whether the captured carbon dioxide stream is a 'hazardous waste' subject to RCRA." *Id.* at 18 (emphasis in original).

II. CERCLA ISSUES: *"Robbing Peter to Pay Paul"*

A. Financial Assurance Guidance for Superfund Settlement Agreements and Orders: *"Show Me the Money"*

1. EPA requires financial assurance (FA) from potentially responsible parties (PRPs) under the authority of CERCLA §§ 106 and 122 to protect human health and the environment by ensuring that adequate financial resources are available to conduct site cleanups without the need for public funding sources.

   a. FA requirements are included in settlement agreements (consent decrees (CDs) and administrative settlement agreements and orders on consent (AOCs)) and unilateral administrative orders (UAOs).

   b. FA has been a national enforcement initiative for CERCLA and RCRA enforcement programs in recent years.

   c. Historically, EPA-issued model UAOs have been silent on the use of FA funds.

   d. EPA is separately developing financial responsibility regulations pursuant to CERCLA § 108(b).

      (i) EPA published an advanced notice of proposed rulemaking in 2010 for four classes of facilities it plans to evaluate regarding the development of financial responsibility requirements (hard rock mining, chemical manufacturing, petroleum and cool products manufacturing, and electric power generation, transmission, and distribution industries). *See* 75 Fed. Reg. 816 (Jan. 6, 2010). EPA expects to propose a rule by August 2016 for the hard rock mining sector.

      (i) Environmental groups filed a writ of mandamus to require EPA to issue financial responsibility regulations. *In re: Idaho Conservation League, et al,* Case No. 14-1149 (D.C. Cir.) (filed Aug. 8, 2014).

2. On April 6, 2015, EPA issued an internal memorandum[7] to the Regional Counsels and Superfund National Program Managers to "further the Agency's commitment to facilitate cleanups through the imposition of FA requirements in the cleanup enforcement program and to provide transparency in the use of our Superfund authority." EPA issued four documents:

   a. Guidance on FA in Superfund settlements and UAOs (FA Guidance)[8]

   b. Updates to six previously-issued sample FA mechanisms[9] for use in connection with CERCLA settlement agreements

   c. Model language provisions for use in UAOs addressing FA and enforcement/work takeovers (Model Provisions)[10]

   d. Six new sample FA mechanisms[11] for use in connection with UAOs

3. The FA Guidance attempts to capture prior FA policy documents, knowledge developed and lessons learned by EPA over the years, and is intended to ensure enforceability and consistency of FA requirements across regions.

   a. EPA emphasizes the ability to access FA-assured funds without delay to ensure cleanups continue without disruption.

   b. EPA continues the "enforcement first" policy of assigning the burden of cleanup to responsible parties regardless of how the PRPs' financial positions may change over time.

4. The FA Guidance instructs that FA requirements should be included in settlements and UAOs and that those requirements can take a variety of forms depending on site conditions and the status of the case on the Superfund timeline.

   a. Site-specific considerations

      (i) Risk factors: potential risks to human health and the environment if PRPs' required cleanup work at a site were to cease prior to completion.

[7] http://www2.epa.gov/sites/production/files/2015-04/documents/fa-guide-transmit-2015.pdf
[8] http://www2.epa.gov/sites/production/files/2015-04/documents/fa-guide-2015.pdf
[9] http://www2.epa.gov/sites/production/files/2015-04/documents/fa-guide-complete-2015.pdf
[10] http://www2.epa.gov/sites/production/files/2015-04/documents/fa-provision-fa-work-2015.pdf
[11] http://www2.epa.gov/sites/production/files/2015-04/documents/fa-guide-complete-2015.pdf

(ii) Estimated cost of performing the response action: the more costly the response action, the more important it is for FA to be in place to protect scarce government resources.

(iii) Estimated time to complete the response action: FA may not be as crucial for shorter term actions (e.g., time-critical removal actions) yet is extremely important for longer term work requirements (e.g., where construction or O&M is required for a year or more, and especially where the requirements span a very long period of time or are perpetual).

(iv) Nature and extent of contamination at the site or facility: FA can be essential at sites with significant quantities of contamination, especially since certain types of contamination are more difficult or complicated to address than others.

(v) Details concerning PRPs obligated to perform the response action (e.g., industry sectors in which PRPs operate and their long-term viability). FA is especially important at sites where the long-term viability of PRPs is in question.

b. Regional office discretion

(i) Regions have discretion to allow or not allow PRPs to use particular FA mechanisms (e.g., requiring forms of FA that are more easily converted to cash to fund cleanups such as a letter of credit at certain sites). FA Guidance at p. 3.

(ii) The FA Guidance purports to require Headquarters' Office of Site Remediation Enforcement (OSRE) prior written approval before an EPA regional office an allow a settlement without FA requirements, or omitting or substantially modifying liquid FA requirements.

(iii) All FA provisions in UAOs require the Region to consult with OSRE.

(iv) Regions must consider the PRP's obligations for all sites and regulatory programs in evaluating FA, and not only the particular Superfund site in question.

5. Potential FA mechanisms

a. Trust fund – "an agreement between a PRP (the trust's "grantor") and a trustee whereby the trustee holds grantor-provided funds in trust to pay for EPA-approved cleanup expenses."

b. Surety bond – "a contract between a PRP (the bond's "principal") and an issuing institution (the bond's "surety") whereby the surety guarantees that it will pay for or perform the PRP's cleanup work obligations up to a specified amount if the PRP fails to perform such work as required."

c. Letter of credit – "a document issued by an institution that guarantees the payment of a PRP's (the letter of credit "applicant") cleanup work obligations up to a specified amount if the PRP fails to perform such work as required."

d. Insurance policy – "a contract between a PRP (the "insured" policyholder) and an insurance company (the "insurer") whereby the insurer agrees to pay for claims made against the PRP or policy in connection with site-related issues."

e. Financial test – "specified criteria and reporting requirements that a PRP must satisfy to demonstrate its ability to pay for its cleanup work obligations."

f. Corporate guarantee - "a guarantee by an affiliated entity (the "guarantor") of a PRP, predicated on the guarantor's ability to satisfy specified financial test criteria and reporting requirements, to pay for or perform the PRP's cleanup work obligations if the PRP fails to perform such work as required."

g. For other nonstandard mechanisms – escrow accounts, certificates of deposit, commitments to secure FA upon asset sales – Regions are "encouraged to contact OSER's FA team for assistance."

h. Standby trust fund. The FA Guidance mandates that EPA should require PRPs subject to UAO FA requirements to establish an unfunded "standby" trust fund that a FA mechanism would pay into in the event the PRP fails to perform work under the UAO.

(i) "Standby trusts are necessary in conjunction with certain UAO FA mechanisms because, in the absence of a settlement agreement, EPA cannot establish special accounts in accordance with CERCLA § 122(b)(3) to retain and use the funds." FA Guidance at 9.

(ii) Model UAO FA provisions specify a mandatory deposit of FA funds into standby trusts to facilitate required cleanup work under UAOs where FA is established by using a surety bond, letter of credit or corporate guarantee.

(iii) Upon a failure to perform required UAO work, EPA could direct FA providers to deposit funds assured under the UAO into the standby trust whereby the trustee would use the funds to fulfill the PRPs' UAO obligations. FA Guidance at p. 10.

i. The relative convertibility into cash of a particular FA mechanism will be relevant in EPA's consideration of a PRP's proposed FA mechanism.

(i) Additional scrutiny and/or requirements (e.g., more frequent submissions and notifications about bond rating downgrades) will be applied to the financial test and corporate guarantee mechanisms where no FA monies are set aside by the PRP or guarantor.

(ii) Use of lower-cost FA alternatives may trigger higher oversight billings by EPA where it may be time-consuming given the regional financial expertise, capabilities and administrative burdens to understand and administer analyses. *See* FA Guidance at pp. 8-9, and n. 27. The prior model provisions EPA has used since 1990 have been silent on the use of FA funds. EPA "strongly encourages" Regions to include the new model language in UAOs for "more costly and time-consuming response actions." *See* Model Provisions at 1.

(iii) EPA typically will not allow a combination of cash-convertible FA mechanisms with non-funded or delayed-funded FA mechanisms (e.g., letter of credit together with corporate guarantee). The FA Guidance cites increased administrative burden and possible confusion in monitoring FA mechanisms as reasons such combinations will generally not be allowed. FA Guidance at p. 10.

6. EPA's new model UAO language for FA includes nine provisions, including the following provisions.

a. EPA created a "work takeover" model provision to allow EPA to assume oversight of work at a site using funds from the FA mechanism if the PRP violates a UAO.

b. The standby trust provisions require creation of a trust fund to ensure that funds will be available as and when needed for performance. The trust must be administered by a qualified trustee and the trust must be governed by an agreement that requires the trustee to make payments from the fund as directed by EPA.

c. As typical for CERCLA settlements, EPA will include a stipulated penalty provision in a CD or AOC for violations of FA requirements.

d. In the access to FA provision, EPA may issue a Performance Failure Notice that specifies grounds for failure to timely, completely or properly implement work. If a Respondent does not remedy the circumstances giving rise to the notice within 10 days, EPA may direct the FA provider to deposit funds into the standby trust or arrange for performance of the work.

7. Potential Effects

a. Increased costs associated with FA. Restriction of a PRP's ability to use self-insurance in settlements and UAOs could increase PRPs' costs. Similarly, not allowing a PRP to use a corporate guarantee to satisfy FA requirements in all situations would require a more expensive alternative mechanism to be secured.

b. Apparent restriction of PRPs' ability to use self-insurance FA mechanisms.

(i) The financial test and corporate guarantee FA mechanisms are the most commonly used mechanisms because they do not require a PRP to set aside funds for a third-party FA mechanism while also funding cleanup of a site.

(ii) FA Guidance clearly does not encourage the financial test (FT) and corporate guarantee (CG) mechanisms.

(a) EPA considers these mechanisms to be less liquid and accessible because they are not usually readily convertible to cash.

(b) EPA outlines several detailed "practical considerations" applicable to the FT and CG mechanisms that Regions should consider in reviewing a PRP's financial information which will increase the level of scrutiny in negotiating settlements.

(c) The level of financial expertise and understanding of corporate financial statements or practices is likely to vary at EPA from one case team to another.

c. Increased scrutiny and more detailed requests for business financial information. When negotiating FA provisions and

mechanisms, PRPs can expect more questions from EPA to justify less liquid or self-insurance mechanisms and more information requests to keep EPA project managers updated. Care should also be exercised in reviewing potentially overlapping or redundant FA terms in negotiating settlements.

d. Uncertainties in how FA requirements will be imposed from one case to another. Despite its stated intent of increasing consistency, the FA Guidance purports to give Regions discretion in how they require FA provisions in settlements, and directs Regions to apply such discretion on a case-by-case basis. This could well lead to inconsistencies between regions.

e. Increased FA Enforcement

(i) The FA Guidance instructs Regions to consider instituting enforcement actions for common FA violations such as failure to: obtain adequate FA; submit required FA documentation; satisfy the metrics underlying the financial test and corporate guarantee mechanisms; secure alternative FA when appropriate. *See* FA Guidance at p. 16.

(ii) Noncompliance with FA obligations could lead to a work takeover, stipulated or civil penalties, or initiation of an enforcement action to obtain injunctive relief to require FA.

B. **CERCLA Administrative Proceedings Constitute a "Suit"**: *"Got You Over a Barrel"*

1. CERCLA administrative proceedings are a "suit" in commercial general liability insurance policies. *McGinnes Industrial Maintenance Corp. v. The Phoenix Ins. Co.*, No. 14-0465 (Tex. June 26, 2015).

2. The issue in the case the Fifth Circuit certified to the Texas Supreme Court was whether EPA's PRP letters and/or unilateral administrative order, issued pursuant to CERCLA, constituted a "suit" within the meaning of the PRP's commercial general liability (CGL) insurance policies, triggering the duty to defend.

3. CERCLA provides EPA with two options for cleanup.

a. Conduct cleanup and seek to recover costs from PRPs; or

b. Compel PRPs to perform cleanup through administrative or judicial proceedings.

(i) Notice letters and unilateral administrative orders essentially direct PRPs to conduct cleanup or else be subject to civil penalties and punitive damages. 42 U.S.C. §§ 9604(b), 9622(a), 9606(a), 9606(b)(1), 9607(c)(3).

(ii) Clean up first; litigate later. PRPs cannot seek judicial review until the CERCLA administrative process is complete. *Id.* § 9613(h)

4. EPA issued notice letters and then a UAO to McGinnes, and McGinnes requested its insurers defend the EPA proceedings. The insurers refused on the basis that the notice letters and UAO were not a "suit" within the meaning of the CGL policy.

5. In a 5-4 split, the majority held EPA's CERCLA enforcement proceedings constitute a "suit." Op. at 8.

a. CERCLA administrative proceedings are like judicial proceedings, and before CERCLA the agency's enforcement mechanisms were available to EPA only in judicial proceedings. *Id.* at 10.

(i) PRP notice letters are akin to pleadings in a judicial proceeding

(ii) Requests for information are akin to discovery

(iii) Invitations to settle are similar to mediation

(iv) UAOs essentially constitute a summary judgment

(v) Fines and penalties are akin to sanctions. *Id.* at 8.

b. Cleanup costs under CERCLA are "damages" in CGL policies. To prevent "perverse incentives and consequences for insurers and insureds," where there is a duty to indemnify, an insurer should have a right and duty to defend proceedings where damages result. *Id.* at 11.

c. Uniformity in identical insurance provisions is "prudent to strive for." *Id.* at 13. Thirteen of sixteen state high courts that have considered the issue have interpreted CERCLA administrative proceedings to be a "suit" in standard-form CGL policies. *Id.* at 11.

6. Result: A PRP letter holds the same impact as a legal complaint – it allows the EPA to require compliance, conduct discovery and impose penalties. It is not necessary for EPA to initiate a lawsuit for a policyholder to be held accountable for environmental cleanup.

C. **Emitters of Air Pollutants as CERCLA "Arrangers"**

1. In *Pakootas v. Teck Comminco Metals, Ltd.* Case No. 15-35228 (9th Cir.), appellant seeks to overturn a Washington district court decision refusing to strike claims that the appellant can be held liable as an "arranger" under CERCLA on the basis of its air emissions that landed on the CERCLA site.

2. Appellant originally sought reconsideration of the district court's decision on the basis of *Center for Community Action and Environmental Justice v. BNSF Railway Co.*, 764 F.3d 1019 (2014), a RCRA case in which the 9th Circuit held that emitting diesel particulate matter into the air does not constitute "disposal" under RCRA. The district court distinguished this opinion, however, and refused to dismiss the claims.

3. The District Court certified its order for an immediate interlocutory appeal to the 9th Circuit, recognizing that no other court has addressed this issue.

III. EPA RULES: *"Opening a Can of Worms"*

A. Federal Underground Storage Tank ("UST") Regulations Updated: *"Batten Down the Hatches"*

1. In the first major revision to the federal UST regulations in 40 CFR Part 280 since 1988, EPA adopted changes to the UST regulations and conforming changes to the state program approval regulation. 80 Fed. Reg. 41566 (July 15, 2015) (EPA-HQ-UST-2011-0301). The changes serve to increase emphasis on properly operating and maintaining UST equipment and to establish federal requirements that are similar to key portions of the Energy Policy Act of 2005. The rules become effective October 13, 2015.

2. The new regulations expand and add requirements for several categories. Each of the changes have varying implementation deadlines, notification requirements and record-keeping obligations.

   a. The UST rule adds secondary containment requirements for new and replaced tanks and piping, and under-dispenser containment for new dispenser systems.

   b. The rule expands operator training requirements.

   c. Many inspection and testing requirements designed to ensure proper operation and maintenance of UST systems are added by the new rule.

d. The rule adds requirements to ensure UST system compatibility before storing certain biofuel blends.

e. Past deferrals for emergency generator tanks, airport hydrant systems, and field-constructed tanks are removed.

f. EPA updated codes of practice requirements to reflect UST system technology advances that have occurred since 1988; and

g. The rule updates the state program approval requirements in 40 CFR Part 281. States with approved programs will have three years to submit a revised state program approval package to EPA.

3. Texas already has more than 20,000 petroleum storage tanks for which TCEQ must conduct investigations at least every three years. Depending on the compliance rate with the new and existing rules, there could be an increase in TCEQ enforcement actions.

B. **Nonhazardous Secondary Materials Rule**: *"Better the Devil You Know than the Devil You Don't"*

1. EPA promulgated its NHSM rule to establish standards and procedures for identifying whether NHSM are solid wastes when used as fuels or ingredients in combustion units. 78 Fed.Reg. 9112 (February 7, 2013). *See* 40 CFR 241.3(a), (b) (establishing general exclusions and legitimacy criteria).

2. Whether a secondary material is a solid waste determines whether EPA regulates a facility burning the material under 42 USC § 7429 (RCRA) or § 7412 (CAA).

3. Industry and environmental petitioners challenged the NHSM rule, and the D.C. Circuit upheld it. *Eco Servs. Operations LLC v. EPA*, D.C. Cir., No. 11-1189 (June 3, 2015) (rejecting all challenges to NHSM rule).

a. In denying environmental petitioners' review, the court concluded that the CAA, RCRA and D.C. Circuit Court precedents did not prevent EPA from defining solid waste to exclude certain NHSMs combusted for energy or used as an ingredient for fuel. Op. at 3.

b. The Court denied industry petitioners' argument that EPA does not have jurisdiction over firm-to-firm transfers of alternative fuels. The Court stated that "EPA is well within its statutory authority to assume that transferred material is solid waste until an interested party demonstrates that the material has not been discarded and is indistinguishable in all relevant aspects from a fuel product." Op. at 4, citing 40 CFR § 241.3(c)(1).

4. EPA proposed amendments to the NHSM rule in 2014 to add three materials to the list of categorical non-waste fuels, allowing them to be burned as fuel rather than solid wastes. *See* 79 Fed.Reg. 21006 (April 14, 2014). EPA sent a proposed final rule to OMB on July 15, 2015. The proposed rule classifies the following materials as non-waste fuels:

   a. Construction and demolition (C&D) wood processed from C&D debris according to best management practices;

   b. Paper recycling residuals, including old cardboard rejects, generated from the recycling of recovered paper and paperboard products and burned on-site by paper recycling mills whose boilers are designed to burn solid fuel; and

   c. Creosote treated railroad ties that are processed and combusted in units designed to burn both biomass and fuel oil.

C. **Upcoming Waste Rules in 2015**: *"Don't Hold your Breath"*

1. Landfill Research Projects (RIN 2050-AG75). EPA is expected to propose a rule that would remove the current 12-year time limit on research, development, and demonstration permits that allow testing and development of innovative technologies at landfill sites.

2. Hazardous Waste Pharmaceuticals (RIN 2050-AG39).

   a. EPA projected a summer 2015 publication of a proposed rule that would create a new regulatory scheme for health-care facility-specific issues unique to hospitals, pharmacies and other health-related facilities. The rule is limited to pharmaceutical waste that meets the definition of RCRA hazardous waste.

   b. The rule stems from EPA's December 2, 2008 proposal to add pharmaceutical hazardous waste to the Universal Waste Program. *See* 73 Fed. Reg. 73520 (Dec. 2, 2008). The rule is expected to have a significant impact on management of unused and/or expired pharmaceuticals and non-dispensable pharmaceuticals.

   c. How broadly EPA defines "healthcare facilities" and "point of generation" will greatly determine the breadth of the new rule.

   d. EPA sent its proposed rule to the White House Office of Management and Budget (OMB) on March 15, 2015.

IV. ENFORCEMENT: *"I Need that Like I Need a Hole in the Head"*

A. National Enforcement Initiative: *"Bite the Dust"*

1. Every three years, EPA sets national enforcement initiatives to focus civil and criminal enforcement resources and expertise on serious pollution problems affecting communities.

2. Reducing Pollution from Mining and Mineral Processing Operations is the current waste-related National Enforcement Initiative.[12]

    a. Mineral processing is also known as non-metallic mineral product manufacturing, and includes the stone, glass, clay and concrete product sectors.

    b. EPA's rationale that supports the national initiative is that mining and mineral processing facilities generate more toxic and hazardous waste than any other industrial sector. Cleanup at these sites costs taxpayers billions of dollars.

    c. EPA's stated goal is to take action to minimize or eliminate risks to drinking water and other threats to communities and the environment from illegal or high risk hazardous waste operations at phosphoric acid and other high risk mineral processing facilities.

3. EPA's oversight of permitted mineral processing sites includes 6,600 facilities, with over 20,000 process units (as reported in the 2018 strategic plan).[13]

4. In 2014, pursuant to this National Enforcement Initiative, EPA Region 6 worked with the Department of Justice, EPA's Office of Enforcement and Compliance Assurance and the Louisiana Department of Environmental Quality to address compliance issues at several phosphate fertilizer plants in Louisiana.

B. Regional Enforcement Priorities: *"That Hits Too Close to Home"*

1. "Illegal hazardous waste management practices" and "hazardous waste investigations" are designated Regional Enforcement Priorities for EPA Region 6.

    a. According to EPA, over 60 percent of the hazardous waste in the U.S. is generated in Region 6–over 22 million tons annually. *See*

[12] http://www2.epa.gov/enforcement/national-enforcement-initiative-reducing-pollution-mineral-processing-operations
[13] http://www2.epa.gov/planandbudget/strategicplan

Region 6 Compliance Assurance and Enforcement Division FY 2014 Annual Report.[14]

b. For this priority, Region 6 is focusing on "data mining" to target and develop compliance investigations. Facilities selected for investigations in 2014 came directly from or were informed by the data mining effort.

c. Data from EPA's Biennial Reporting System indicated the following potential RCRA violations:

(i) Reporting and notification requirements (such as conditionally exempt small quantity generators that are really large quantity generators).

(ii) Shipments of hazardous waste to unauthorized facilities and shipping on bills of lading rather than manifests.

(iii) Failure to meet other applicable requirements, such as proper storage, contingency planning, and worker training.

2. EPA Region 6's Compliance Assurance and Enforcement Division annual enforcement report, "The Year Ahead" includes a summary of Region 6's enforcement activities. *See* Annual Report.[15]

a. EPA reported an "upward trend" in FY 2014 in the number of enforcement actions resulting from on-site inspections. In FY 2014, Region 6 conducted on-site inspections at five facilities suspected of violating hazardous waste storage, treatment, and/or disposal requirements. Issues identified included receipt of unauthorized waste streams, operation of unpermitted units, and releases to the environment. *Id.* at 3-4.

b. Half of FY 2014, Region 6 final enforcement actions came directly from the data reported by companies and did not require field investigations. *Id.* at 3.

c. Region 6 issued eight consent agreements and final orders with penalties ranging from $42,000 to $143,000 in cases where the data alone supported enforcement actions. *Id.* at 4.

3. Region 6 doubled the number and outcome results of enforcement actions in FY 2014 from FY2013 without increasing on-site inspection levels. In

[14] http://www.epa.gov/earth1r6/6en/14AnnRep.pdf

[15] http://www.epa.gov/earth1r6/6en/14AnnRep.pdf

2014, Region 6 issued 18 final administrative penalty orders, two administrative orders, and entered one judicial consent decree. *Id.* at 8.

C. **Next Generation Compliance in RCRA Context**: *"There's more than One Way to Skin a Cat"*

1. Next Gen Compliance is EPA's strategy to use new tools and approaches to pollution challenges. Five components make up the Next Gen Compliance strategy:

   a. Design regulations and permits that are easier to implement, with a goal of improved compliance and environmental outcomes.

   b. Use and promote advanced emissions/pollutant detection technology so that regulated entities, the government, and the public can more easily see pollutant discharges, environmental conditions, and noncompliance.

   c. Shift toward electronic reporting to help make environmental reporting more accurate, complete, and efficient while helping EPA and co-regulators such as state and local governments better manage information, improve effectiveness and transparency.

   d. Expand transparency by making information more accessible to the public.

   e. Develop and use innovative enforcement approaches (e.g., data analytics and targeting) to achieve more widespread compliance.

2. The RCRA Generator Initiative is a Next Gen strategy that Region 6 is using to administer its Regional Enforcement Initiative.

   a. This new targeting method utilizes data mining to inform the region's targeting and pre-inspection preparation.

   b. EPA staff search existing data collections to identify parties who ship hazardous waste for disposal and calculate quantities shipped.

   c. EPA identifies generators who have not complied with notification requirements or who operate under an incorrect generator status.

   d. No on-site inspection is conducted, and a complete enforcement case may be solely based on the records review.

V. RCRA CITIZEN SUITS: *"The Devil is in the Details"*

A. "Anti-Duplication" Provision: *"If It's Not One Thing, It's Another"*

1. RCRA § 1006(a), otherwise known as the "anti-duplication" provision, is designed to minimize overlap and prevent inconsistencies between RCRA and other environmental statutes. It states that nothing in RCRA applies to activities or substances subject to other environmental statutes "except to the extent that such application (or regulation) is not inconsistent with the requirements of such Acts." 42 U.S.C. § 6905(a).

2. *Ecological Rights Found. v. Pacific Gas & Elec. Co.*, No. 15-15424 (9th Cir.). In this pending citizen suit, Plaintiffs allege that seepage of pentachlorophenol and dioxins from chemically treated utility poles constitutes a solid waste regulated by RCRA even though stormwater discharges are regulated under the Clean Water Act ("CWA"). Plaintiffs seek civil penalties, declaratory and injunctive relief. The district court dismissed the citizen suit based on RCRA's anti-duplication provision because the stormwater discharges from service yards were also "subject to" CWA regulation.

   a. On appeal, EPA filed an amicus brief in support of its interpretation of Section 1006(a) "to preserve the most expansive interpretation possible regarding the jurisdictional reach of the environmental laws." EPA's position with respect to Section 1006(a) is that RCRA applies so long as its application is not inconsistent with appropriate CWA requirements. Br at 6. EPA arguments included:

      (i) The anti-duplication provision should be applied on a case-by-case basis and cannot be used to categorically exempt activities from RCRA. Br. at 7-13.

         (a) The defendant bears the burden of demonstrating an inconsistency. Br. at 7, 13-14.

         (b) Overlapping regulatory schemes alone are insufficient basis to create a 1006(a) inconsistency. Br. at 9.

         (c) The examination of whether there is an inconsistency must be done by conducting a case-by-case comparison of the individual requirements imposed by RCRA and the CWA. *Id.*

      (ii) Existing precedent supports further review and comparisons by the district courts where there is no allegation of specific inconsistency with another statute.

(a) Cmty. Ass'n for Restoration of the Env't, Inc. v. George & Margaret LLC, 954 F.Supp.2d 1151, 1160 (E.D. Wash. 2013).

(b) *San Francisco Herring Ass'n v. Pac. Gas & Elec. Co.*, No. 14-cv-04393, 2015 WL 859420, at 13 (N.D. Cal. Feb. 26, 2015).

b. At the time of this paper, the Ninth Circuit had not issued a ruling in this case.

3. *Goldfarb v. City of Baltimore et al.*, No. 14-1825 (4th Cir. July 1, 2015). In this suit, Plaintiffs allege that hazardous waste contaminates portions of property historically used for chemical manufacturing that is to be developed under a public-private agreement as a casino and ancillary facilities, and that the waste has been migrating across the waterfront and to the shoreline of the Patapsco River. The district court had dismissed the suit pursuant to § 1006(a) (the anti-duplication provision) based on the Defendants' arguments that the relevant NPDES permit included remediation activities Defendant CBAC Gaming had conducted under Maryland's Voluntary Cleanup Program. The Defendants argued that CBAC Gaming's remediation activities had been incorporated into its NPDES permit, and compliance with the NPDES permit shielded Defendants from liability under RCRA. Op. at 5.

a. The Fourth Circuit vacated the district court's ruling. Op. at 13. The court determined that there was no demonstrated conflict between RCRA and the provisions of the CWA, and that the district court had not undertaken any analysis in its opinion to determine whether any RCRA requirements were inconsistent with the NPDES permit. Op. at 21-22.

b. The court determined that the anti-duplication provision is more in the nature of an affirmative defense than a jurisdictional barrier to recovery. Op. at 16.

B. **Manure as Solid Waste?:** *"That Chaps My Hide"*

1. Community Association for Restoration of the Environment, Inc. v. Cow Palace, LLC, No. 13-CV-3016-TOR (E.D.Wash. Jan. 14, 2015).

a. Federal District Court Judge Thomas Rice of the Eastern District of Washington considered the question of whether manure is a solid waste under RCRA.

(i) EPA has traditionally exempted cow manure applied to soil as fertilizer under RCRA. 40 C.F.R. § 261.4.

(ii) To avoid violating RCRA's open dumping provision, a facility cannot dispose of solid waste in a manner that would "contaminate an underground drinking water source beyond the solid waste boundary." 40 C.F.R. § 257.3-4(a); 42 U.S.C. § 6945(a).

b. Plaintiffs alleged that "Defendants' manure management practices constitute open dumping of solid waste and cause an imminent and substantial danger to public health and the environment because when the manure is improperly managed and stored, as well as over-applied to agricultural fields, it is discarded and consequently contributes to high levels of nitrates in underground drinking water." Order at 3.

c. On cross motions for summary judgment, the judge concluded that because of the defendants' land application, lagoon storage, and composting practices, the manure constituted solid waste, and that Cow Palace's manure management constituted imminent and substantial endangerment to human health and the environment.

(a) RCRA's legislative history and EPA's supporting regulations explicitly state that RCRA's provisions do not apply to agricultural wastes, but only to the extent the wastes are "returned to the soil as fertilizers or soil conditioner." 40 C.F.R. § 257.1(c)(1); Op. at 84, citing H.R. Rep. No. 94-149(I) at 2 (1976).

(b) Citing 9th Circuit precedent, Judge Rice concluded that "whether manure can be considered a solid waste hinges, factually, on whether the manure is handled and used in such a manner that its usefulness as a fertilizer is eliminated." Op. at 85, citing *Safe Air for Everyone v. Meyer,* 373 F.3d 1035, 1042, 1045-46 (9th Cir. 2004); *Ecol. Rights Found. v. Pac. Gas & Elec. Co.*, 713 F.3d 502, 515 (9th Cir. 2013).

(c) Plaintiffs introduced fact-specific evidence that supported the imminent and substantial endangerment finding.

(1) Defendants' failure to adhere to its dairy nutrient management plan and failure to comply with best management practices provided strong evidence that the dairy's application of manure was not useful or

beneficial but rather constituted discard. Op. at 88.

(2) Storage of manure in permeable lagoons was tantamount to knowingly abandoning the material to the underlying soil. Op. at 93.

(3) Manure in an unlined composting area was knowingly abandoned and accumulating in dangerous quantities. Op. at 95.

(4) A reasonable fact finder could conclude based on evidence presented that the Dairy's operations were contributing to nitrate groundwater contamination. Op. at 100; 42 U.S.C. §§ 6903(3), 6972(a)(1)(B) (standard is to show operations "contributed' or are "contributing" to disposal of solid waste which "may" be posing a serious threat to public health). *See* Op. at 104-105 ("[T]here can be no dispute that the Dairy's operations may present an imminent and substantial endangerment to the public who is consuming the contaminated water").

d. The case settled before it went to trial.

(i) Ninth Circuit will not take up or rule on the manure as solid waste issue.

(ii) Judge Rice's summary judgment ruling could be used as a model for other plaintiffs with similar facts.

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Austin, Texas

THE DEFINITION OF SOLID WASTE & THE COAL COMBUSTION RESIDUALS RULE: AN OVERVIEW OF THE RULES WITH A FOCUS ON STATE IMPLEMENTATION ISSUES

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The Definition of Solid Waste and the Coal Combustion Residuals Rule: An Overview of the Rules with a Focus on State Implementation Issues

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This paper presents an overview of two significant solid waste rulemakings finalized in 2015 by the United States Environmental Protection Agency ("EPA" or "the Agency") under the authority of the Resource Conservation and Recovery Act ("RCRA").[1] The first rulemaking is EPA's most recent attempt to revise the Agency's definition of solid waste to facilitate the recycling of hazardous secondary materials without increasing risks to human health and the environment. The second rulemaking is EPA's landmark rule regulating the storage and disposal of ash and other residuals from the combustion of coal to generate electricity at coal-fired power plants. This paper is not intended to be, and is not, a detailed analysis of the provisions of these new federal regulations. Rather, as presented below, the key regulatory provisions of each rule are summarized, followed by an analysis of the issues associated with state implementation of each rule.

I. THE DEFINITION OF "SOLID WASTE"

The overarching goals of RCRA are twofold: (1) the protection of human health and the environment and (2), as the statute's name suggests, the promotion of resource conservation and recovery.[2] With respect to hazardous waste, RCRA's stated objectives are to assure that such waste is properly managed, and to minimize hazardous waste generation "by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment."[3] EPA has referred to the latter of these two objectives as "RCRA's overall objective of promoting the use, re-use, recycling and reclamation of wastes."[4] As the Agency has recognized, the benefits to encouraging and facilitating such activities are far-reaching:

> The use, re-use, recycling and reclamation of wastes not only helps preserve valuable natural resources and reduces the environmental problems which stem from the exploitation of those resources, but, if properly conducted, may eliminate

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1 42 U.S.C. §§ 6901-6992k.

2 *See id.* § 6902(a) ("The objectives of [RCRA] are to promote the protection of health and the environment and to conserve valuable material and energy resources . . . ."); *see also* 45 Fed. Reg. 33,084, 33,094 (May 19, 1980) (referring to "RCRA's dual goals of protecting human health and the environment and promoting resource conservation and recovery").

3 42 U.S.C. § 6902(a)(4)-(6).

4 45 Fed. Reg. at 33,091.

or reduce some of the hazards associated with other types of waste management and alleviate the strain on national [waste] disposal capacity.[5]

EPA has promulgated regulations defining what constitutes a "hazardous waste."[6] Consistent with the RCRA statutory definition of hazardous waste, EPA's regulations define hazardous waste as a subset of "solid waste."[7] A material cannot be regulated by EPA under RCRA as a hazardous waste unless that material is first determined to be a solid waste. Accordingly, the definition of "solid waste" governs the scope of EPA's authority to regulate hazardous materials.[8]

In January 2015, EPA revised the Agency's definition of solid waste ("2015 DSW Rule").[9] Specifically, the 2015 DSW Rule revises the requirements, and exclusions and exemptions, for recyclable hazardous secondary materials.[10]

A. THE 2008 AND 2015 DSW RULES

The 2015 DSW Rule is ultimately the product of a rulemaking process that began in 2003[11] and culminated in 2008 with the publication of a final rule revising the definition of solid waste ("2008 DSW Rule").[12]

1. The 2008 DSW Rule

The 2008 DSW Rule revised the definition of solid waste to be less stringent by conditionally excluding certain recyclable hazardous secondary materials from regulation as hazardous wastes: (1) if they are legitimately reclaimed under the control of the generator of the material (the "generator-controlled exclusion")[13] or (2) if they are transferred for the purpose of legitimate reclamation (the "transfer-based exclusion").[14] Under the generator-controlled exclusion, the hazardous secondary materials had to be contained in storage units and could not be speculatively accumulated.[15] While EPA provided limited guidance on when a material is

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5 *Id.*

6 *See* 40 C.F.R. § 261.3.

7 *See* 42 U.S.C. § 6903(5); 40 C.F.R. § 261.3.

8 *See* 45 Fed. Reg. at 33,090 ("Because no material can be a 'hazardous waste' without first being a 'solid waste" . . ., what constitutes a 'solid waste' is really the definitional starting point for the hazardous waste management system.").

9 *See* 80 Fed. Reg. 1693 (Jan. 13, 2015).

10 EPA defines "hazardous secondary material" as "a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste." 40 C.F.R. § 260.10.

11 *See* 68 Fed. Reg. 61,557 (Oct. 28, 2003).

12 *See* 73 Fed. Reg. 64,667 (Oct. 30, 2008).

13 *See id.* at 64,680-83.

14 *See id.* at 64,683-700.

15 *See id.* at 64,669.

"contained,"[16] the Agency did not promulgate a definition of "contained." Additionally, the transfer-based exclusion applied to hazardous secondary material transfers both within and outside of the United States and its territories.[17]

The 2008 DSW Rule also established a voluntary non-waste determination process whereby a person could receive a formal administrative determination that their hazardous secondary materials are not solid wastes when legitimately reclaimed.[18] Finally, the 2008 DSW Rule codified four factors to be used in determining whether recycling is legitimate and not actually waste treatment or disposal under the guise of recycling (i.e., "sham" recycling).[19] The legitimacy factors were made applicable to the two 2008 exclusions and to non-waste determinations, but EPA declined to apply them to all hazardous material recycling.[20] Additionally, the first two legitimacy factors were made mandatory, while the last two factors were not mandatory but "must be considered."[21]

The 2008 DSW Rule was challenged both administratively and judicially.[22] EPA settled the administrative challenge and, per the terms of the settlement agreement, the Agency published a notice of proposed rulemaking to further revise the definition of solid waste, which was finalized as the 2015 DSW Rule.[23]

2. The 2015 DSW Rule

There are several significant changes to the definition of solid waste in the 2015 DSW Rule. Certain of these are described briefly below.[24]

While the 2015 DSW Rule was targeted, on the whole, at the 2008 DSW Rule's perceived leniency or shortcomings, certain of the 2015 DSW Rule's new requirements affect, or may affect, longstanding exclusions or exemptions for recyclable hazardous secondary materials that were in effect before (and were unchanged by) the 2008 DSW Rule. These requirements include, but may not be limited to, the new speculative accumulation and legitimacy provisions discussed below.[25]

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16 *See id.* at 64,681 ("Generally, [hazardous secondary] material is 'contained' if it is placed in a unit that controls the movement of the hazardous secondary material out of the unit and into the environment.").

17 *See id.* at 64,698-99.

18 *See id.* at 64,710-13.

19 *See id.* at 64,700-10.

20 *See id.* at 64,675.

21 *Id.* at 64,701.

22 *See* 80 Fed. Reg. at 1700.

23 *See id.* at 1701-03.

24 For a more thorough analysis of the 2015 DSW Rule, the author commends to the reader the detailed summary and analysis prepared by his colleagues, Aaron Goldberg and Don Patterson, which is available via a link provided in the post at the following website: http://www.bdlaw.com/news-1678.html.

25 *See* 80 Fed. Reg. at 1735-36.

a. Generator-Controlled Exclusion

The 2015 DSW Rule retains the 2008 DSW Rule's generator-controlled exclusion, but makes it more stringent[26] by adding: (1) a codified definition of "contained," (2) recordkeeping requirements for same-company and toll manufacturing reclamation, (3) a notification condition, (4) a requirement to document the legitimacy of the recycling; and (5) emergency preparedness and response conditions.[27] The 2015 DSW Rule also amended the speculative accumulation requirements to include a recordkeeping requirement (which applies not just to the exclusion, but to all persons subject to speculative accumulation requirements).[28]

EPA views the "contained" standard as "one of the major requirements for determining that hazardous secondary materials reclaimed under the generator-controlled exclusion are not discarded."[29] Under the new, codified definition of "contained," a hazardous secondary material is presumptively "contained" if it is managed in a unit that: (1) is in good condition, with no unpermitted releases of the material to the environment and is designed to prevent such releases; (2) is labeled or has a system (such as a log) to identify the material in the unit; and (3) holds compatible materials.[30] If these standards are not met, "the materials remaining in the unit would be considered solid and hazardous wastes and the unit would be subject to the appropriate hazardous waste regulations."[31]

Additionally, while the 2008 DSW Rule required notification of a facility's intent to reclaim hazardous secondary material under the generator-controlled exclusion, it did so as a separate notification requirement. The 2015 DSW Rule makes notification a condition of the generator-controlled exclusion.[32] EPA reasons that the difference between a requirement and a condition is in "the consequences an entity would face for failing to notify."[33] "[I]f notification is a requirement . . ., it means that failure to notify would constitute a violation of the notification regulations. On the other hand, if notification is a condition of the exclusion, it means failure to notify would potentially result in the loss of the exclusion . . . ."[34]

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26 The 2015 DSW Rule makes the 2008 DSW Rule's generator-controlled exclusion more stringent, with one exception. The 2015 DSW Rule now extends the exclusion to certain spent petroleum catalysts, which were ineligible for the exclusion under the 2008 DSW Rule. *See id.* at 1737-38. These spent petroleum catalysts are also eligible for the verified recycler exclusion discussed below. *See id.* at 1738.

27 *See id.* at 1703-06, 1774-75; 40 C.F.R. § 261.4(a)(23).

28 Materials subject to speculative accumulation requirements must now be placed in a storage unit with a label that contains the first date that the material began to be accumulated. If such a label is impracticable, the accumulation period must be indicated in an inventory log or through other appropriate means. *See* 80 Fed. Reg. at 1705, 1773; 40 C.F.R. § 261.1(c)(8).

29 *See* 80 Fed. Reg. at 1704.

30 *See id.* at 1704, 1771; 40 C.F.R. § 260.10.

31 80 Fed. Reg. at 1704.

32 *See* 40 C.F.R. § 261.4(a)(23)(ii)(C).

33 80 Fed. Reg. at 1705.

34 *Id.*

b. *Verified Recycler Exclusion*

In the 2015 DSW Rule, EPA replaced the 2008 DSW Rule's transfer-based exclusion with a more stringent exclusion for hazardous secondary materials that are transferred to a "verified recycler" for reclamation (the "verified recycler exclusion").[35] To avoid having their hazardous secondary materials become hazardous wastes, generators must send their materials to a RCRA-permitted recycler, or a verified recycler of hazardous secondary materials that has a solid waste variance from EPA or an authorized state.[36] This condition replaces the 2008 DSW's requirement under the transfer-based exclusion that generators make "reasonable efforts" to audit the recycling facilities that they use.[37] Generators are required to maintain records of off-site hazardous secondary material shipments for three years.[38] Additional conditions of the verified recycler exclusion include, but are not limited to, those applicable to the generator-controlled exclusion (i.e., speculative accumulation, notification, containment, and emergency preparedness and response).[39]

EPA views the condition requiring verification of the recycler as "one of the major differences between the transfer-based exclusion" and the verified recycler exclusion.[40] The variance process to obtain verification, in EPA's view, "addresses the major regulatory gap in the transfer-based exclusion" – a "lack of oversight and public participation for hazardous secondary material recycling facilities that do not have RCRA permits."[41] To obtain a variance from EPA or an authorized state, a recycler must: (1) show that its recycling process is legitimate; (2) provide financial assurance; (3) not have a significant history of noncompliance or be subject to a formal enforcement action in the past three years (unless the facility provides "credible evidence" that it will manage the hazardous secondary materials appropriately); (4) have the necessary equipment and trained personnel to safely manage the hazardous secondary material and meet the emergency preparedness and response requirements; (5) have the necessary permits or contracts to manage any residuals generated from the reclamation process (or provide credible evidence that the facility will properly manage them); and, (6) address the potential risk to nearby populations from unpermitted releases (including cumulative risks from other local stressors).[42] The first five of these requirements are based on the substantive criteria of the "reasonable efforts" condition that applied under the transfer-based exclusion (noted above).[43]

The recycling facility must maintain records similar to those required for hazardous secondary material generators.[44] Recycling facilities must manage hazardous secondary

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35 *See id.* at 1706-15, 1775; 40 C.F.R. § 261.4(a)(24).

36 *See* 80 Fed. Reg. at 1711, 1775; 40 C.F.R. § 261.4(a)(24)(v)(B).

37 *See* 80 Fed. Reg. at 1711.

38 *See id.* at 1711-12, 1775; 40 C.F.R. § 261.4(a)(24)(v)(C).

39 *See* 80 Fed. Reg. at 1709-10, 1775-76; 40 C.F.R. § 261.4(a)(24).

40 80 Fed. Reg. at 1713.

41 *Id.*

42 *See id.* at 1713, 1772; 40 C.F.R. § 260.31(d).

43 *See* 80 Fed. Reg. at 1713-14.

44 *See id.* at 1712, 1775; 40 C.F.R. § 261.4(a)(24)(vi)(A).

materials in a manner that is at least as protective as that employed for the analogous raw material.[45] Where there is no analogous raw material, the hazardous secondary material must be contained.[46]

Because the verified recycler exclusion requires that hazardous secondary materials be sent to a RCRA-permitted recycler or a verified recycler that has a solid waste variance from EPA or an authorized state, this exclusion is available only for recycling conducted within the United States.[47]

c. Solid Waste Variances and Non-Waste Determinations

The 2015 DSW Rule revised the pre-2008 provisions for solid waste variances and the 2008 DSW Rule's provisions for non-waste determinations to include several new requirements: (1) facilities must now send a notice to EPA or the authorized state and possibly re-apply for a variance if there is a change in circumstances that impacts the basis of the variance; (2) variances and non-waste determinations have fixed terms not to exceed ten years, after which facilities must re-apply; (3) facilities must re-notify every two years with updated information; (4) variances for partially reclaimed materials must meet new and revised mandatory criteria; and, (5) petitioners' non-waste determinations must show that existing solid waste exclusions do not cover them.[48]

d. Prohibition on Sham Recycling and Revised Legitimacy Criteria

In the 2015 DSW Rule, EPA codified its longstanding prohibition on sham recycling,[49] and it amended the 2008 DSW Rule's definition of legitimate recycling, making all four 2008 factors mandatory.[50] The first two factors require that the recycling involve a hazardous secondary material that provides "a useful contribution to the recycling process or to a product or intermediate of the recycling process" and that the process produces "a valuable product or intermediate."[51] Both of these factors remain largely unchanged from the 2008 DSW Rule.

The third and fourth factors, while now mandatory, are more flexible than under the 2008 DSW Rule (recognizing, however, the implicit flexibility that is lost in making these factors mandatory rather than merely considerations in legitimacy determinations). The third factor requires that generators and recyclers treat hazardous secondary material "as a valuable commodity."[52] If there is an analogous raw material, the hazardous secondary material should be managed consistent with the management of the raw material, but there is now an alternative

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45 *See* 80 Fed. Reg. at 1712, 1776; 40 C.F.R. § 261.4(a)(24)(vi)(D).

46 *See* 80 Fed. Reg. at 1712.

47 *See id.* at 1711, 1775; 40 C.F.R. § 261.4(a)(24)(v)(B).

48 *See* 80 Fed. Reg. at 1732-35, 1771-72; 40 C.F.R. §§ 260.30(f), 260.31(c)-(d), 260.33(c)-(e), 260.34(b)(4), (c)(5).

49 *See* 80 Fed. Reg. at 1719, 1730, 1774; 40 C.F.R. § 261.2(g).

50 *See* 80 Fed. Reg. at 1722-23, 1773; 40 C.F.R. § 260.43(a).

51 80 Fed. Reg. at 1723-24, 1773; 40 C.F.R. § 260.43(a)(1)-(2).

52 80 Fed. Reg. at 1724, 1773; 40 C.F.R. § 260.43(a)(3).

available to manage it in "an equally protective manner."[53] If there is no analogous raw material, the third factor requires that the secondary hazardous material be "contained," as that term is newly defined and codified under the 2015 DSW Rule, as discussed above.[54]

The fourth factor requires that the product be comparable to legitimate products or intermediates produced from virgin feedstock.[55] If there is an analogous product made from raw materials, the product of the recycling process is comparable if it (1) exhibits no hazardous characteristics that analogous products do not exhibit and (2) has hazard constituent concentrations "comparable to" or lower than those in analogous products, or at levels meeting widely-recognized commodity standards.[56] In cases where there is no analogous product made from raw materials, the product of recycling satisfies the fourth factor if it meets widely-recognized commodity standards or when the hazardous secondary material is recycled back into the production process from which it was generated.[57] The new 2015 DSW Rule also provides flexibility for certifying recycling processes even where the product has constituent levels of hazardous materials that are not comparable to analogous products.[58]

e. Remanufacturing Exclusion

While, on the whole, the intent of the 2015 DSW Rule is to achieve greater stringency (as versus the 2008 DSW Rule), the 2015 DSW Rule does contain a notable new conditional exclusion for hazardous secondary materials: the "remanufacturing exclusion."[59] The exclusion covers "certain higher-value solvents transferred from one manufacturer to another for the purpose of extending the useful life of the original solvent by remanufacturing the spent solvent back into the commercial grade solvent."[60]

The 2015 DSW Rule lists 18 spent solvents eligible for remanufacturing under this exclusion.[61] These hazardous spent solvents are only eligible for remanufacturing if they were originally used in a certain way and if they serve certain types of chemical functions after they are remanufactured.[62] Acceptable post-remanufacture chemical functions include "reacting, extracting, purifying, or blending chemicals" or using them as ingredients, but not "cleaning or degreasing oil, grease or similar material from textiles, glassware, metal surfaces or other articles."[63] Furthermore, this exclusion is available only if the generator and remanufacturer are

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53 80 Fed. Reg. at 1724, 1773; 40 C.F.R. § 260.43(a)(3).

54 *See* 80 Fed. Reg. at 1724, 1773; 40 C.F.R. § 260.43(a)(3).

55 *See* 80 Fed. Reg. at 1725-26, 1773; 40 C.F.R. § 260.43(a)(4).

56 80 Fed. Reg. at 1725-26, 1773; 40 C.F.R. § 260.43(a)(4)(i).

57 *See* 80 Fed. Reg. at 1726, 1773; 40 C.F.R. § 260.43(a)(4)(ii).

58 *See* 80 Fed. Reg. at 1726, 1773; 40 C.F.R. § 260.43(a)(4)(iii).

59 *See* 80 Fed. Reg. at 1695, 1715-19, 1776; 40 C.F.R. § 261.4(a)(27).

60 80 Fed. Reg. at 1695.

61 *See id.* at 1716, 1776; 40 C.F.R. § 261.4(a)(27)(i).

62 *See* 80 Fed. Reg. at 1716-17, 1776; 40 C.F.R. § 261.4(a)(27)(ii), (iv).

63 80 Fed. Reg. at 1716, 1776; 40 C.F.R. § 261.4(a)(27)(iv)-(v).

in the pharmaceutical manufacturing, basic organic chemical manufacturing, plastics and resins manufacturing, or paints and coatings manufacturing sector.[64]

B. STATE IMPLEMENTATION

The effective date of the 2015 DSW Rule is July 13, 2015,[65] but the rule took effect on that date only in the two states (Alaska and Iowa) that have not been delegated authority under RCRA to implement their own definitions of solid waste.[66] Under RCRA § 3006, EPA can delegate RCRA Subtitle C authority to the states, thereby authorizing the state "to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state."[67] Authorized states are required to revise their hazardous waste programs only when EPA promulgates federal hazardous waste regulations that are more stringent, or broader in scope, than those that existed prior to the new federal rules.[68] Because the requirements of an authorized state hazardous waste program may be more stringent, or broader in scope, than those of the federal program,[69] authorized states are not required to adopt federal hazardous waste regulations that are less stringent, or narrower in scope, than those that existed prior to the new federal rules.[70]

Because the 2015 DSW Rule is more stringent than the 2008 DSW Rule, those authorized states that adopted the 2008 DSW Rule are required to modify their hazardous waste programs to incorporate the more stringent provisions of the new rule.[71] But only a few states adopted the 2008 DSW Rule.[72] For the vast majority of states that did not adopt the 2008 DSW Rule (which includes Texas), EPA maintains that many of the provisions of the 2015 DSW Rule (e.g., the revised generator-controlled exclusion, the verified recycler exclusion, and the remanufacturing exclusion) are less stringent than the federal hazardous waste program that existed prior to the 2008 DSW Rule.[73] Accordingly, authorized states that did not adopt the 2008 DSW Rule are not required to adopt these less stringent provisions of the 2015 DSW Rule.[74] But, EPA also maintains that certain provisions of the 2015 DSW Rule are more stringent (i.e., the revised legitimacy definition, the prohibition on sham recycling, the speculative

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64 *See* 80 Fed. Reg. at 1717, 1776; 40 C.F.R. § 261.4(a)(27)(ii)-(iii).

65 *See* 80 Fed. Reg. at 1694.

66 *See id.* at 1768. The rule also took effect on July 13, 2015, on Native American lands where EPA administers RCRA.

67 *Id.* at 1768; *see also* 42 U.S.C. § 6926(b); 40 C.F.R. Pt. 271 ("Requirements for Authorization of State Hazardous Waste Programs").

68 *See* 80 Fed. Reg. at 1768; 42 U.S.C. § 6929; 40 C.F.R. § 271.21 (procedures for revisions of state hazardous waste programs).

69 *See* 80 Fed. Reg. at 1768; 42 U.S.C. § 6929; 40 C.F.R. § 271.1(i)(1)-(2).

70 *See* 80 Fed. Reg. at 1768.

71 *See id.*

72 *See Where is the DSW Final Rule in Effect?*, EPA, http://www.epa.gov/epawaste/hazard/dsw/statespf.htm (last updated Feb. 23, 2015).

73 *See* 80 Fed. Reg. at 1768.

74 *See id.*

accumulation labeling and recordkeeping requirements, and the standards and criteria for variances from the definition of solid waste).[75] All authorized states will be required to adopt these more stringent requirements.[76]

Some states that did not adopt the 2008 DSW Rule may choose not to adopt the exclusions in the 2015 DSW Rule. But other such states may elect to adopt the 2015 exclusions, since they were promulgated to rectify the perceived leniency or shortcomings of the 2008 exclusions, which caused many states to pass on adoption of the 2008 DSW Rule. The end result is likely to be a continued patchwork of authorized state definitions of solid waste that vary in terms of stringency and the exclusions allowed, among other differences.

Varying definitions of solid waste from state to state can present compliance problems or, at least, added compliance burdens, for companies with operations in multiple states. Such companies may not be able to maintain consistent, company-wide procedures for the management and recycling of hazardous secondary materials. Additionally, interstate shipments of hazardous secondary materials could present multiple compliance issues (e.g., if the materials are excluded from regulation as a solid waste in the generating state, but are transported through one or more states where they are regulated as hazardous waste). Questions regarding proper manifesting of the materials and applicable transportation requirements can arise in such circumstances, and those questions are not addressed by EPA in the preamble to the 2015 DSW Rule.

II. THE COAL COMBUSTION RESIDUALS RULE

In April 2015, EPA promulgated regulations governing the treatment, storage, and disposal of "coal combustion residuals" ("CCR") from the combustion of coal at coal-fired electric utilities ("CCR Rule").[77] The regulations were promulgated under RCRA Subtitle D, regulating CCR as nonhazardous solid waste.[78] The CCR Rule marks the first time that CCR have been regulated at the federal level.

A. DEFINITIONS AND DATA

CCR are the residuals "generated from the combustion of coal . . . for the purpose of generating steam for the purpose of powering a generator to produce electricity or electricity and other thermal energy by electric utilities and independent power producers."[79] CCR – commonly referred to as "coal ash" – include "fly ash, bottom ash, boiler slag, and flue gas desulfurization materials."[80]

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75 *See id.* at 1768-69.

76 *See id.* at 1769.

77 80 Fed. Reg. 21,301 (Apr. 17, 2015).

78 *See id.* at 21,303.

79 *Id.*

80 *Id.* at 21,303, 21,469; 40 C.F.R. § 257.53 (effective Oct. 19, 2015).

CCR may be sent off-site for disposal or beneficial use, or disposed of on-site in landfills or surface impoundments.[81] EPA estimates that "CCR disposal currently occurs at over 310 active on-site landfills, . . . and at over 735 active on-site surface impoundments."[82] CCR are typically disposed of dry or dewatered in landfills, whereas wet disposal is more the norm in surface impoundments.[83] A CCR landfill is "an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave."[84] A CCR surface impoundment is "a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR."[85] CCR landfills and surface impoundments are often collectively referred to in the CCR Rule (and herein) as "CCR units."[86]

B. SCOPE AND APPLICABILITY

The CCR Rule applies to existing and new landfills and surface impoundments, and lateral expansions of landfills and surface impoundments, used for the treatment, storage, or disposal or other management of CCR generated by electric utilities and independent power producers.[87] This includes not only on-site units, but also "CCR units located off-site of the electric utilities' or independent power producers' facilities that receive CCR for disposal."[88]

The CCR Rule does not apply to: (1) CCR landfills that cease receiving CCR prior to the effective date of the rule (October 19, 2015); (2) CCR units at covered facilities that cease producing electricity prior to the effective date of the rule; (3) the placement of CCR in coal mines (referred to as "minefills"); (4) the beneficial use of CCR (as discussed below); and (5) municipal solid waste landfills that receive CCR.[89]

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81 *See* 80 Fed. Reg. at 21,303.

82 *Id.*

83 *See id.* at 21,360-61 ("Unlike landfills, CCR surface impoundments contain slurried residuals that remain in contact with ponded waters until closure.").

84 *Id.* at 21,468-69; 40 C.F.R. §§ 257.2, 257.53 (effective Oct. 19, 2015).

85 80 Fed. Reg. at 21,468-69; 40 C.F.R. §§ 257.2, 257.53 (effective Oct. 19, 2015).

86 80 Fed. Reg. at 21,304, 21,469; 40 C.F.R. § 257.53 (effective Oct. 19, 2015).

87 *See* 80 Fed. Reg. at 21,303, 21,340, 21,468; 40 C.F.R. § 257.50(b) (effective Oct. 19, 2015). CCR generated by non-utility boilers burning coal are not subject to the current CCR Rule, but may be addressed by EPA in a subsequent rulemaking. *See* 80 Fed. Reg. at 21,302, 21,340, 21,468; 40 C.F.R. § 257.50(f) (effective Oct. 19, 2015).

88 80 Fed. Reg. at 21,303, 21,340, 21,468; 40 C.F.R. § 257.50(b) (effective Oct. 19, 2015).

89 *See* 80 Fed. Reg. at 21,303-04, 21,340-42, 21,468; 40 C.F.R. § 257.50(d)-(i) (effective Oct. 19, 2015).

C. MINIMUM NATIONAL CRITERIA

The CCR Rule establishes minimum national criteria for CCR units.[90] Certain of the criteria apply to all units, whereas the applicability of other criteria varies by unit type. Surface impoundments are subject to more and more stringent requirements than landfills, and existing landfills have the fewest applicable requirements.

1. Location Restrictions

The CCR Rule conditionally prohibits CCR placement in five locations: less than five feet above the uppermost aquifer, and in wetlands, fault areas, seismic impact zones, and unstable areas.[91] Existing CCR landfills are subject only to the location restriction for unstable areas.[92]

2. Liner Design Criteria

The CCR Rule establishes requirements for lining all units except existing CCR landfills. New landfills and new surface impoundments, and all lateral expansions of CCR units, must be lined with a composite liner that includes a synthetic geomembrane and a two-foot layer of compacted soil, or an alternative liner that performs at least as effectively as the composite liner.[93] New CCR landfills are required to have a system that collects and removes leachate from the landfill.[94] Existing surface impoundments are not required to be lined; however, if these units are unlined and groundwater contamination is detected at the unit at statistically significant levels above the groundwater protection standard, then the unit is required to be retrofitted or closed.[95]

3. Structural Integrity Requirements

Structural integrity requirements apply to new and existing surface impoundments and all lateral expansions of these units.[96] As to individual surface impoundments, the applicability of the structural integrity requirements varies based on impoundment-specific factors, such as the height of the impoundment's dike, and the potential for loss of life, environmental damage, and economic loss if the dike were to fail.[97] Various structural integrity-related assessments are required, including: (1) hazard potential classification assessments; (2) structural integrity

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90 *See* 80 Fed. Reg. at 21,468; 40 C.F.R. § 257.50(a) (effective Oct. 19, 2015).

91 *See* 80 Fed. Reg. at 21,304, 21,361, 21,471-73; 40 C.F.R. §§ 257.60-.64 (effective Oct. 19, 2015).

92 *See* 80 Fed. Reg. at 21,304, 21,361, 21,473; 40 C.F.R. § 257.64 (effective Oct. 19, 2015).

93 *See* 80 Fed. Reg. at 21,304, 21,369, 21,473-75; 40 C.F.R. §§ 257.70, 257.72 (effective Oct. 19, 2015).

94 *See* 80 Fed. Reg. at 21,304, 21,371, 21,474; 40 C.F.R. § 257.70(d) (effective Oct. 19, 2015).

95 *See* 80 Fed. Reg. at 21,304, 21,371, 21,474, 21,490; 40 C.F.R. §§ 257.71, 257.101(a)(1) (effective Oct. 19, 2015).

96 *See* 80 Fed. Reg. at 21,304, 21,376-86, 21,475-78; 21,474; 40 C.F.R. §§ 257.73-.74 (effective Oct. 19, 2015).

97 *See* 80 Fed. Reg. at 21,304, 21,379-80.

assessments; and (3) safety factor assessments for slope stability.[98] Failure to demonstrate minimum safety factors or complete a timely safety factor assessment requires closure of the unit.[99]

4. Operating Criteria

The daily operations of CCR units are governed by limited, specified operating criteria.[100] All CCR units are subject to air criteria aimed at reducing windblown emissions of CCR.[101] CCR landfills have specified stormwater run-on and run-off controls.[102] Surface impoundments have hydrologic and hydraulic capacity requirements to control overtopping and erosion of these units.[103] Periodic inspections for signs of structural weakness or other conditions warranting investigation are also required.[104]

5. Groundwater Monitoring and Corrective Action

The CCR Rule requires all CCR units to install a groundwater monitoring well system and to sample and analyze groundwater periodically for specified constituents and parameters that may be indicative of a release from the unit.[105] The monitoring well system "must consist of a sufficient number of appropriately located wells (at least one upgradient and three downgradient wells) in order to yield groundwater samples from the uppermost aquifer that represent the quality of background groundwater and the quality of groundwater passing the waste boundary."[106]

The required groundwater monitoring program is three-phased.[107] In the first phase – detection monitoring – a limited suite of indicator parameters are monitored to determine whether there may have been a release to groundwater.[108] If a statistically significant increase of one or more of these parameters is detected above background groundwater concentrations, the facility is required to enter assessment monitoring to assess whether a release from a CCR unit has occurred.[109] If a groundwater protection standard is determined to have been exceeded due to a release of CCR, the facility enters the third phase where corrective action measures must be

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98 *See id.* at 21,304, 21,377-78, 21,381-83.

99 *See id.* at 21,304, 21,385, 21,477, 21,479, 21,490-91; 40 C.F.R. §§ 257.73(f)(4), 257.74(f)(4), 257.101(b)(2), 257.101(c)(1) (effective Oct. 19, 2015).

100 *See* 80 Fed. Reg. at 21,304, 21,479-82; 40 C.F.R. §§ 257.80-.84 (effective Oct. 19, 2015).

101 *See* 80 Fed. Reg. at 21,304, 21,387-88, 21,479; 40 C.F.R. § 257.80 (effective Oct. 19, 2015).

102 *See* 80 Fed. Reg. at 21,304, 21,388-90, 21,480; 40 C.F.R. § 257.81 (effective Oct. 19, 2015).

103 *See* 80 Fed. Reg. at 21,304, 21,391-92, 21,480-81; 40 C.F.R. § 257.82 (effective Oct. 19, 2015).

104 *See* 80 Fed. Reg. at 21,304, 21,393-96, 21,481-82; 40 C.F.R. §§ 257.83-.84 (effective Oct. 19, 2015).

105 *See* 80 Fed. Reg. at 21,304-05, 21,398, 21,482-89; 40 C.F.R. §§ 257.90-.98 (effective Oct. 19, 2015).

106 80 Fed. Reg. at 21,399, 21,483; 40 C.F.R. § 257.91(a) (effective Oct. 19, 2015).

107 *See* 80 Fed. Reg. at 21,305.

108 *See id.* at 21,397, 21,403-04, 21,485-86; 40 C.F.R. § 257.94 (effective Oct. 19, 2015).

109 *See* 80 Fed. Reg. at 21,397, 21,404-06, 21,486-87; 40 C.F.R. § 257.95 (effective Oct. 19, 2015).

assessed and a remedy must be selected and implemented to address the release.[110] The groundwater monitoring program must be implemented throughout the active life and post-closure care period of the CCR unit.[111]

6. Closure and Post-Closure Requirements

The CCR Rule specifies requirements for the closure and post-closure care of all active CCR units and inactive CCR surface impoundments.[112] Closure may be accomplished by leaving the CCR in the unit and capping the unit with a final cover, or by removing the CCR from the unit.[113] The post-closure care period extends for 30 years following closure, during which time the unit must be monitored and maintained.[114]

7. Recordkeeping, Notification, and Internet Posting Requirements

All CCR units are required to maintain an operating record with certain facility information (e.g., required plans, records, reports, and certifications), and to notify the appropriate state regulatory authority when information is placed in the operating record.[115] The CCR Rule places an emphasis on transparency and furthers this goal by requiring facilities to maintain a publicly-accessible internet site and to post operating record information and compliance demonstrations on that site.[116]

D. BENEFICIAL USE

EPA notes that, in 2012, approximately 110 million tons of CCR were generated, and approximately 40% of that tonnage was beneficially used.[117] Two of the most significant "encapsulated" beneficial uses of CCR are as a substitute for Portland cement in the production of concrete and as a replacement for mined gypsum in wallboard.[118] A significant unencapsulated beneficial use of CCR is "as a stabilized base course in highway construction."[119]

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110 *See* 80 Fed. Reg. at 21,305, 21,399, 21,406-08, 21,487-89; 40 C.F.R. §§ 257.96-.98 (effective Oct. 19, 2015).

111 *See* 80 Fed. Reg. at 21,397, 21,483; 40 C.F.R. § 257.90(c) (effective Oct. 19, 2015).

112 *See* 80 Fed. Reg. at 21,305, 21,409-26, 21,489-96; 40 C.F.R. §§ 257.100-.104 (effective Oct. 19, 2015).

113 *See* 80 Fed. Reg. at 21,305, 21,411-14, 21,489-90, 21,492; 40 C.F.R. §§ 257.100(b)(1), (b)(5), 257.102(c)-(d) (effective Oct. 19, 2015).

114 *See* 80 Fed. Reg. at 21,305, 21,496; 40 C.F.R. § 257.104(c) (effective Oct. 19, 2015).

115 *See* 80 Fed. Reg. at 21,305, 21,426-27, 21,496-99; 40 C.F.R. §§ 257.105-.106 (effective Oct. 19, 2015).

116 *See* 80 Fed. Reg. at 21,305, 21,338-39, 21,426-27, 21,499-500; 40 C.F.R. § 257.107 (effective Oct. 19, 2015).

117 *See* 80 Fed. Reg. at 21,303, 21,327.

118 *See id.* at 21,327-28. "An encapsulated beneficial use is one that binds the CCR into a solid matrix that minimizes mobilization into the surrounding environment." *Id.* at 21,328, 21,469; 40 C.F.R. § 257.53 (effective Oct. 19, 2015).

119 80 Fed. Reg. at 21,328.

EPA did not find any danger to human health or the environment from the encapsulated and unencapsulated beneficial uses of CCR sufficient to warrant regulation under RCRA.[120]

Beneficial use of CCR is not subject to the CCR Rule if the use satisfies the following four criteria of the rule's beneficial use definition:

(1) The CCR must provide a functional benefit;
(2) The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices such as extraction;
(3) The use of CCR must meet relevant product specifications, regulatory standards, or design standards when available, and when such standards are not available, CCR are not used in excess quantities; and
(4) When unencapsulated use of CCR involves placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use.[121]

If a use of CCR does not meet the relevant criteria for beneficial use, it "will be considered to be disposal of CCR, subject to all of the requirements in the disposal regulations, and the user will be considered to be the owner or operator of a CCR disposal unit."[122]

E. IMPLEMENTATION AND ENFORCEMENT

The CCR Rule is somewhat unique among federal regulations in that it is a "self-implementing rule with no direct federal oversight."[123] No permits or other authorizations are required.[124] Indeed, the CCR Rule does not require regulated entities to interact with regulators beyond the limited requirement to notify state regulators when information has been added to the facility's operating record.[125]

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120 *See id.* at 21,329-30, 21,349.

121 *Id.* at 21,349, 21,469; 40 C.F.R. § 257.53 (effective Oct. 19, 2015).

122 80 Fed. Reg. at 21,349, 21,468; 40 C.F.R. § 257.50(b) (effective Oct. 19, 2015) (providing that the CCR Rule "applies to any practice that does not meet the definition of beneficial use of CCR").

123 80 Fed. Reg. at 21,303; *see also id.* at 21,311 ("The federal standards apply directly to the facility (are self-implementing) and facilities are directly responsible for ensuring that their operations comply with these requirements."), 21,312 ("The [S]ubtitle D . . . option was designed to be self-implementing, meaning that facilities could comply with the regulatory requirements without the need to interact with a regulatory authority."), 21,330 ("The final rule establishes self-implementing requirements . . . that owners or operators of regulated units can implement without any interaction with regulatory officials.").

124 *See id.* at 21,309, 21,311, 21,312, 21,330, 21,332, 21,398, 21,429.

125 *See id.* at 21,312, 21,330.

With respect to enforcement, EPA has promulgated a rule that the Agency cannot lawfully enforce: "EPA cannot enforce these requirements."[126] The requirements of the CCR Rule can only be enforced by states or citizens, and only under RCRA's citizen suit provision, § 7002.[127] That provision conditionally authorizes the commencement of a civil action against any person alleged to be in violation of any regulation, requirement, or prohibition "which has become effective pursuant to" RCRA.[128]

These limitations on implementation and enforcement are a product of the RCRA Subtitle D provisions under which the CCR Rule was promulgated.[129] "EPA has no role in the planning and direct implementation of the minimum national criteria or solid waste programs under RCRA [S]ubtitle D, and has no authority to enforce the criteria."[130]

F. STATE IMPLEMENTATION

States are not required to adopt or implement the federal CCR Rule requirements, or any other solid waste management program for CCR.[131] "States are not required to incorporate or implement these requirements under any state permitting program or other state law requirement, and EPA is not authorized to impose such requirements, directly or indirectly on the states."[132] Here again, EPA's authority is constrained by the RCRA Subtitle D provisions under which the CCR Rule was promulgated.[133] Under these provisions, EPA cannot delegate to the states the authority to implement the federal CCR program, as EPA itself has no such authority to delegate:[134]

> [U]nder the provisions of [S]ubtitle D applicable to solid waste, states are not required to adopt or implement these regulations, to develop a permit program, or submit a program covering these units to EPA for approval and there is no mechanism for EPA to officially approve or authorize a state program to operate "in lieu of" the federal regulations.[135]

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126 *Id.* at 21,309.

127 *See id.* at 21,309, 21,310, 21,311, 21,312, 21,335, 21,399.

128 42 U.S.C. § 6972(a)(1)(A).

129 *See* 80 Fed. Reg. at 21,309, 21,310, 21,312, 21,330, 21,332, 21,398.

130 *Id.* at 21,310; *see also id.* at 21,311 ("Congress created a regulatory structure that limited EPA's role to the creation of national criteria that would operate even in the absence of a regulatory entity to oversee or implement the criteria.").

131 *See id.* at 21,309, 21,310, 21,429.

132 *Id.* at 21,311; *see also id.* at 21,332 ("EPA cannot establish any requirements on states or state programs, either directly or indirectly.").

133 *See id.* at 21,330.

134 *See id.*

135 *Id.* at 21,429.

Although EPA cannot delegate to the states the authority to implement the federal CCR program, EPA "strongly recommends" that states incorporate the CCR Rule requirements into their state-based solid waste program:

> In order to ease implementation of the regulatory requirements for CCR units with state programs, EPA is . . . providing the opportunity for states to secure approval of its CCR program through the State Solid Waste Management Plan ("SWMP"). EPA strongly recommends that states take advantage of this process by revising their SWMPs to address the issuance of the revised federal requirements in this final rule, and to submit revisions of these plans to EPA for review. EPA would then review and approve the revised SWMPs provided they demonstrate that the minimum federal requirements in this final rule will be met. In this way, EPA's approval of a revised SWMP signals EPA's opinion that the state SWMP meets the minimum federal criteria.[136]

However, as noted above, EPA cannot approve any state CCR program – whether or not included in the state's SWMP approved by EPA – to operate "in lieu of" the federal CCR Rule.[137] States "can continue to enforce any state regulation that applies to CCR under their independent state enforcement authority," but even in states that have a CCR regulatory program that meets or exceeds the minimum national criteria in the CCR Rule, the federal requirements of the CCR Rule will continue to apply independent of the state's CCR requirements.[138]

Some states have an existing CCR regulatory program, and others may adopt one. As commenters on the CCR Rule argued when the rule was proposed, the inability of a state CCR program to operate in lieu of the CCR Rule will "most certainly result in parallel and redundant regulatory programs for CCR in many states, creating an unworkable situation for industry, as well as the state."[139] Commenters also noted the potential enforcement implications of dual regulatory programs – one state and one federal – for CCR units:

> Some commenters argued that under this dual regulatory approach, an owner or operator of a CCR unit could conceivably be in non-compliance with both a federal requirement and an independently administered state regulatory requirement, subjecting the owner or operator to both a citizen suit enforcement action in federal court for the alleged violation and to a wholly separate enforcement action in state court for violation of the parallel state requirement.

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136 *Id.* at 21,303; *see also id.* at 21,309, 21,430. In the preamble to the CCR Rule, EPA discusses the role and development of SWMPs and the process for EPA approval of state SWMPs. *See id.* at 21,430-31; *see also* 40 C.F.R. Pt. 256 ("Guidelines for the Development and Implementation of State Solid Waste Management Plans").

137 80 Fed. Reg. at 21,330, 21,332, 21,412, 21,429; *see also id.* at 21,331 ("EPA cannot approve state programs in this rule."), 21,333 ("Approval of a state's SWMP . . . does not affect the federal minimum standards themselves, or authorize states to do so."), 21,431 ("EPA approval of a state SWMP does not mean that the state program operates 'in lieu of' the federal program as EPA does not have the authority to make such a determination.").

138 *Id.* at 21,312.

139 *Id.* at 21,331.

> Commenters argued that this regulatory construct made no sense and would waste federal and state judicial resources and company resources, as well as possibly resulting in inconsistent federal and state court determinations with respect to an identical regulatory requirement. It also could result in duplicative federal and state penalties for essentially the same regulatory infraction.[140]

While these comments raise valid concerns, they assume that the requirements of a state CCR program are or will be the same as, or equivalent to, the federal requirements of the CCR Rule. State CCR programs may mirror the federal CCR Rule requirements, but they may also be more or less stringent than the CCR Rule, or may otherwise be substantively different from the federal criteria, since they are not operating in lieu of the CCR Rule requirements.[141] As commenters on the CRR Rule proposal also observed, "because of the many state regulatory programs addressing CCR disposal, there [may] be many instances where state requirements could be in conflict with, in addition to, or separate from the federal requirements."[142] Differing state and federal regulatory regimes place an added burden on regulated entities who must comply with the requirements of both programs, and have the potential to put an owner or operator in the untenable position of having to comply with conflicting state and federal requirements.[143] EPA acknowledges the validity of these concerns: "EPA recognizes that this regulatory structure gives rise to legitimate concerns about the potential for duplicative or conflicting state and federal regulatory systems."[144] But the Agency has to regulate CCR "within the confines of the regulatory structure that Congress established in [S]ubtitle D."[145]

States are now left to decide whether to revise their SWMPs to incorporate the new federal criteria in the CCR Rule. As EPA notes, this decision is particularly acute in states that already have a comprehensive regulatory program for CCR units – one in existence prior to EPA's development of the CCR Rule and one that invariably differs from, and potentially conflicts with, the new federal criteria.[146] Unless those states elect to do away with their CCR programs entirely (unlikely), the compliance burden of dual regulatory programs and the concomitant concerns will remain for industry, but differing, inconsistent, or conflicting state and federal requirements can be avoided by adopting the federal criteria.

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140 *Id.* at 21,331; *see also id.* at 21,429.

141 *See id.* at 21,332, 21,334, 21,339, 21,430.

142 *Id.* at 21,331; *see also id.* at 21,429.

143 *See id.* at 21,429 (noting commenters' concerns "that facilities may need to comply with two sets of potentially differing regulations, perhaps resulting in confusion for the regulated community and the general public, and also potentially resulting in inconsistent results from citizens seeking enforcement of criteria").

144 *Id.* at 21,334.

145 *Id.*

146 *See id.* at 21,429.

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PRACTICES

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- Environmental Litigation
- Hazardous Waste/RCRA
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- Site Remediation
- Solid Waste and Resource Recovery
- Spill Response and Reporting

EDUCATION

- The University of Alabama (B.A., Geology, magna cum laude, 1997; Phi Beta Kappa)
- Tulane Law School (J.D., Certificate in Environmental Law, magna cum laude, 2000; Order of the Coif; Phi Delta Phi)

Bryan helps industrial, commercial, and oil and gas industry clients navigate and resolve contested environmental permitting proceedings, compliance audits, enforcement actions, and litigation so they can construct, operate, and expand their facilities.

Whether in the substantive area of waste, water, or air regulation, Bryan provides comprehensive representation and strategic counseling from the agency rulemaking and permitting process to the administrative hearing and, ultimately, before the court to which an appeal may be taken. Bryan represents clients in matters arising under nearly every major federal and Texas environmental program in state and federal courts, as well as before agencies including the U.S. EPA, the Texas Commission on Environmental Quality, and the Railroad Commission of Texas. He serves on the firm's Management Committee, and chairs the firm's Waste Management and Recycling Practice.

Bryan's recent litigation successes include:

- In three separate appellate cases, securing rulings from the Texas Third Court of Appeals and Seventh Court of Appeals upholding permits authorizing the expansions of three Central Texas municipal solid waste landfill facilities. These expansions provide much needed waste disposal capacity for the rapidly growing Central Texas area. The three cases are captioned:
  - *TJFA, L.P. v. TCEQ*, No. 03-10-00016-CV
  - *Travis Cnty. v. TCEQ*, No. 07-12-00457-CV
  - *Heritage on the San Gabriel Homeowners Ass'n. v. TCEQ*
- Securing a ruling from the Texas Third Court of Appeals, upholding a Texas Pollutant Discharge Elimination System permit for a power plant facility. The case was one of first impression in Texas concerning the requirements for "cooling water intake structures" for existing power plants.

Bryan is recognized in the 2011-2014 editions of *Chambers USA: America's Leading Lawyers for Business* in environmental law. He was elected by his peers for inclusion in the 2012-2015 editions of *The Best Lawyers in America* in the field of environmental law, and was named *Best Lawyers'* 2014-15 "Lawyer of the Year" in Austin Environmental Law. Bryan is also recognized as a "Texas Rising Star" by *Super Lawyers*.

(continued)

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BAR ADMISSIONS & MEMBERSHIPS

- Texas
- District of Columbia
- Maryland
- U.S. District Courts: Eastern, Western, Northern and Southern Districts of Texas; District of Columbia
- U.S. Courts of Appeals: Fifth Circuit; District of Columbia Circuit
- American Bar Association
- Texas Bar Association
- Austin Bar Association
- Air and Waste Management Association

At Tulane Law School, Bryan served as Editor in Chief of the Tulane Environmental Law Journal, and was a recipient of the Haber Joseph McCarthy Environmental Law Award.

PRESENTATIONS

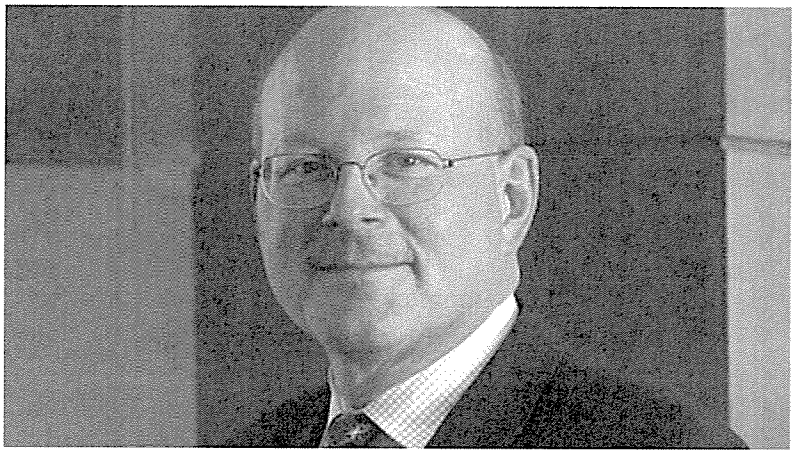
"Environmental Considerations in the Acquisition and Operation of Oil and Gas Properties," Advanced Oil and Gas Short Course, University of Houston Law Foundation, Continuing Legal Education Course, 2007 - 2009 (speaker)

"EPA's March 2007 Proposed Revisions to the Definition of Solid Waste," Texas Association of Environmental Professionals, May 17, 2007

PUBLICATIONS

Texas Environmental Update, *Beveridge & Diamond, P.C.*

Scott W. Tinker's passion is bringing academe, government, industry and NGOs together into what he calls the "radical middle" to address major societal issues in energy and the environment. Scott is director of the 250-person Bureau of Economic Geology, the State Geologist of Texas, and a professor holding the Allday Endowed Chair in the Jackson School of Geosciences at the University of Texas at Austin. Scott has been president of the American Association of Petroleum Geologists, the Association of American State Geologists, the Gulf Coast Association of Geological Societies, and is the president elect of the American Geosciences Institute. Tinker, who has visited over 50 countries and given over 500 keynote and invited lectures to government, industry, academia and the public, is a Fellow of the Geologic Society of America, an honorary member of the AAPG, and is broadly awarded for his efforts to educate the public. Tinker serves on many private, public, academic, and government boards and councils and he co-produced and is featured in the award-winning energy documentary film, Switch.



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Mr. Brooke-Davidson is a shareholder in the Austin, Texas office of Guida, Slavich & Flores, P.C. He has practiced environmental law since 1985, when he received his law degree from The University of Texas School of Law. His practice has included all facets of environmental law: he has experience with all the significant federal environmental laws and their Texas counterparts; his practice has involved litigation, arbitration, mediation, enforcement, permitting, transactions, and counseling; he has worked with various industries including chemicals, energy, agriculture, manufacturing, and real estate; and he has practiced in government as well as in private firms.

EDUCATION

Mr. Brooke-Davidson received his bachelor's and master's degrees from the Massachusetts Institute of Technology, where his graduate work focused on environmental technology and policy issues. Prior to attending law school, he worked as an environmental consultant, focusing on air quality matters.

He graduated from The University of Texas School of Law with honors; he was also a member of the Order of the Coif and served as Editor-in-Chief of *The Review of Litigation*.

BAR ADMISSIONS AND OTHER CREDENTIALS

State Bar of Texas – 11/8/1985
Fifth Circuit Court of Appeals - 10/1/1998
Seventh Circuit Court of Appeals - 7/20/2001
Tenth Circuit Court of Appeals -7/18/2001

Texas Eastern District Court - 5/31/2002
Texas Northern District Court - 6/26/2002
Texas Southern District Court/Bankruptcy Court - 5/8/2002
Texas Western District Court - 10/6/1998
US Patent and Trademark Office - 9/7/2001
Mediator Training, Texas Alternative Dispute Resolution Act – 5/23/2014

HONORS

- Listed in *Best Lawyers in America* in the fields of environmental law and environmental litigation
- *Who's Who Legal*: Environment 2014
- Selected into the Honors Attorney Program of the United States Department of Justice, where he served in the Environmental Enforcement Section for twelve years, first as trial attorney and then as a supervising attorney, receiving three Special Achievement Awards and a Special Commendation

MEMBERSHIPS

Air and Waste Management Association
American Bar Association: Section Memberships –Administrative Law and Regulatory Practice; Dispute Resolution; Environment, Energy, and Resources, Vice Chair, Environmental Enforcement and Crimes Committee; Litigation; and Tort Trial and Insurance Practice
Austin Bar Association: Section Memberships – Administrative; Alternative Dispute Resolution; Civil Litigation; and Environmental Law
Austin Association of Mediators
Association of Attorney Mediators
Central Texas Association of Environmental Professionals
Environmental Law Institute
Federal Bar Association
Houston Bar Association
Industry Council on the Environment - Chairman
State Bar of Texas: Section Memberships – Administrative and Public Law; Alternative Dispute Resolution; Environmental & Natural Resources; and Litigation; Planning Committee for the Annual Texas Environmental Law Superconference
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AUTHORING AND PRESENTING

Mr. Brooke-Davidson has given numerous presentations on a variety of environmental law topics and has authored several articles.

Implementing the 2015 Ozone NAAQS

by Zach Craft, Baker Botts L.L.P.

1. Introduction

The U.S. Environmental Protection Agency (EPA) has proposed to revise the primary national ambient air quality standard (NAAQS) for ozone.[1] At 60 to 70 parts per billion (ppb), the revised NAAQS would be more stringent, and thus require a more stringent emissions control strategy, than any prior ozone NAAQS.[2] Consistent with a 2014 court order,[3] EPA is expected to make a final decision on whether and how to revise the ozone NAAQS by October 1, 2015.[4]

This paper provides an overview of some of the anticipated implementation consequences that would follow if EPA finalizes its proposed revisions to the ozone NAAQS.

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[1] 79 Fed. Reg. 75,233 (Dec. 17, 2014).

[2] *See* 40 C.F.R. §§ 50.9 (1-hour ozone standard of 0.12 ppm), 50.10 (8-hour ozone standard of 0.08 ppm), 50.15 (8-hour ozone standard of 0.075 ppm).

[3] Order Granting Plaintiffs' Motion for Summary Judgment and Denying Defendant's Motion for Summary Judgment, *Sierra Club v. EPA*, No. 4:13-cv-02809 (N.D. Cal. Apr. 30, 2014).

[4] *See, e.g.*, Anna Marie Wood, Director, Air Quality Policy Division, EPA, *NAAQS and Other CAA Implementation Updates* (Clean Air Act Advisory Committee Meeting, Apr. 2015) at 9.

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2. Attainment status

For each part of the U.S., whether the area meets the ozone NAAQS determines whether a host of legal obligations and other provisions under Title I of the Federal Clean Air Act attach. To the extent an area does not meet the NAAQS, the state government generally assumes responsibility for bringing the area into attainment. As summarized by one court,

> [T]he Clean Air Act creates a partnership between the states and the federal government. The state proposes, though the EPA disposes. The federal government through the EPA determines the ends--the standards of air quality--but Congress has given the states the initiative and a broad responsibility regarding the means to achieve those ends through state implementation plans and timetables for compliance.[5]

a. EPA projections on attainment status

EPA's review of state air quality monitoring data for 2011-2013 indicates that large portions of the country will not meet a revised, lower ozone NAAQS.

At the time of EPA's proposal, the agency observed that 358 counties nationwide would exceed a 70 ppb ozone NAAQS based on existing monitoring data.[6] If the NAAQS were 65 ppb, a total of 558 counties would be above the NAAQS.[7] It is possible that a larger number of areas actually exceed the proposed NAAQS,[8] though EPA's historical ozone designation

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[5] *Bethlehem Steel Corp. v. Gorsuch*, 742 F.2d 1028, 1036 (7th Cir. 1984).

[6] EPA Webinar, *Proposed Revisions to National Ambient Air Quality Standards for Ozone* (Dec. 2014) at 16, *available at* http://www.epa.gov/air/ozonepollution/actions.html#current; EPA, *EPA's Proposal to Update the Air Quality Standards for Ground-Level Ozone: By The Numbers* (undated) at 2, *available at* http://www.epa.gov/air/ozonepollution/actions.html#current.

[7] *Id.*

[8] *See, e.g.*, American Petroleum Institute, *New Ozone Rules Could Be Most Expensive Regulations Ever: What Could New Ozone Regulations Cost Texas?* (2014) (depicting spatial interpolation analysis of the extent of unmonitored areas anticipated to exceed the NAAQS).

approach has relied on existing, regulatory-quality monitoring data to determine ozone NAAQS attainment status.[9] In any event, either scenario portrayed by EPA reflects an expansion from the 232 counties subject to a nonattainment designation under EPA's most recent prior ozone NAAQS.[10]

b. Expansive effect of considering CBSAs

The number of counties designated nonattainment for a revised ozone NAAQS could be higher than the 358- and 558-county figures noted in EPA's monitoring data review. For example, although EPA's monitoring data review notes 4 counties in the Houston area that would exceed a 65 or 70 ppb ozone NAAQS,[11] the current Houston ozone nonattainment area includes a total of 8 counties.[12] This expansive approach to boundary setting is illustrative of EPA's past practice for designating ozone nonattainment areas, which has included consideration of the full core based statistical area (CBSA) for purposes of defining ozone nonattainment area boundaries:

> Section 107(d)(1) of the CAA defines an area as nonattainment if it is violating the NAAQS or if it is contributing to a violation in a nearby area. Ground-level ozone and ozone precursors are pervasive and readily transported. Therefore, EPA believes it is important to examine ozone-contributing emissions across a relatively broad geographic area. ***Accordingly, we recommend that the Core Based Statistical Area (CBSA) or Combined Statistical Area (which includes 2 or more adjacent CBSA's) associated with the violating monitor(s) serve as the starting point or "presumptive" boundary for evaluating the geographic boundaries of an ozone nonattainment area.*** CBSA is a collective term that refers to both metropolitan and micropolitan statistical areas, which are distinguished based on population size. Each CBSA consists of a county or counties containing at least one urban core plus adjacent counties that have a high degree of social and economic integration with the urban core as measured by commuting ties. EPA recommends starting with this presumption because the factors used to establish CBSAs and CSAs are similar to the factors EPA plans to consider in determining whether a nearby area is

[9] *See, e.g.*, *Mississippi Commission on Environmental Quality v. EPA*, -- F.3d ----, 2015 WL 3461262, at *10-12 (D.C. Cir. June 2, 2015) (upholding EPA's decision to designate as "unclassifiable" an area for which private monitoring networks indicated ozone exceedances, but which lacked regulatory-quality data to the same effect).
[10] *See* EPA, *Nonattainment Designations for the 2008 Ozone Standards - Counties by State, April 30, 2012 and May 31, 2012*, http://www.epa.gov/ozonedesignations/2008standards/final/finaldes.htm (last accessed July 11, 2015) (listing 192 whole nonattainment counties and 40 partial nonattainment counties).
[11] *See* EPA Webinar, *Proposed Revisions to National Ambient Air Quality Standards for Ozone* (Dec. 2014) at 16 (highlighting Brazoria, Galveston, Harris, and Montgomery Counties).
[12] *See* 40 C.F.R. § 81.344. The additional counties are Chambers, Fort Bend, Liberty, and Waller Counties.

contributing to the violation(s) of the standard. EPA used this same conceptual approach in the designations process for the 1997 ozone NAAQS.[13]

Thus, unless nationwide ozone levels decrease compared to 2011-2013, it appears likely that EPA will consider designating a considerably larger portion of the U.S. as nonattainment for the ozone NAAQS if it is revised.

3. Controls to attain

a. EPA-projected future ozone levels

EPA has projected that "the vast majority of U.S. counties would meet the proposed [ozone] standards by 2025 just with the rules and programs now in place or underway."[14] Specifically, outside California, EPA has projected that only 9 counties would exceed a 70 ppb ozone NAAQS in 2025, and a total of 68 counties would exceed a 65 ppb ozone NAAQS in 2025.[15]

b. Basis for EPA projections

A significant portion of the controls included in EPA's projection have not yet been implemented and thus, even if on the way, are a departure from the status quo. Additional explanation on the assumptions included in EPA's projections of future ozone levels appears in the agency's Regulatory Impact Analysis (RIA) that accompanied the proposal.[16] For example, EPA's projection assumes that the proposed 111(d) Clean Power Plan will generate substantial NO_x emission reductions that will in turn reduce ozone levels.[17]

c. Considerations for areas not predicted to meet standards in 2025

As noted above, EPA has projected that some areas will not attain a revised ozone NAAQS by 2025. For these areas, the agency's analysis suggests that additional control measures would need to be implemented to assure attainment. Such controls are likely to be substantial based on their geographic reach and the unproven nature of the needed technology.

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[13] Memorandum from Robert J. Meyers, Principal Deputy Assistant Administrator, EPA, to Regional Administrators, Regions I-X, *Subject: Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards* (Dec. 4, 2008) at 3 (emphasis added; internal citations omitted); *see also, e.g.*, 42 U.S.C. § 7407(d)(4)(A)(iv) (presumptively revising certain ozone nonattainment area boundaries "to include the entire metropolitan statistical area or consolidated metropolitan statistical area").

[14] EPA, *Overview of EPA's Proposal to Update the Air Quality Standards for Ground-Level Ozone* (Dec. 1, 2014), *available at* http://www.epa.gov/air/ozonepollution/actions.html#current.

[15] *See* EPA Webinar, *Proposed Revisions to National Ambient Air Quality Standards for Ozone* (Dec. 2014) at 17; EPA, *EPA's Proposal to Update the Air Quality Standards for Ground-Level Ozone: By The Numbers* (undated) at 2.

[16] EPA, *Regulatory Impact Analysis of the Proposed Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone*, EPA-452/P-14-006 (Nov. 2014).

[17] RIA at 1-7, 3-11.

i. Geographic scope of controls

For those areas that will not attain, EPA conducted photochemical modeling to determine the measures that would be needed for attainment. The agency's modeled control strategies cover an area much larger than the few counties predicted to be out of attainment.

In a 70 ppb NAAQS scenario, several states would per the agency's modeling impose new emission controls so that four metropolitan areas can attain by 2025:

- For the Dallas and Houston areas to attain a 70 ppb NAAQS, EPA's prediction assumed that new emission controls would be imposed in all counties in Texas, as well as the entire states of Louisiana, Arkansas, and Oklahoma, and several counties in Kansas.[18]

- For the greater New York City and Washington, D.C. areas, EPA's projections call for new controls throughout the states of Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, and the District of Columbia.[19]

The geographic scope of new controls expands significantly under EPA's modeling if the agency chooses to set a 65 ppb ozone NAAQS. In that scenario, EPA has projected that a suite of new control measures would be imposed throughout a majority of the states.[20]

ii. "Unknown" controls

A second key consideration for the areas that EPA has predicted will not attain the ozone standard by 2025 is that the agency has quantified the degree of emissions reductions that would be needed from future technology or "unknown" controls. As stated in the RIA:

> There were several areas where known controls did not achieve enough emissions reductions to attain the alternative standards of 70, 65, and 60 ppb. To complete the analysis, the EPA then estimated the additional emissions reductions beyond known controls needed to reach attainment, also referred to as unknown controls.[21]

A summary table also provided in the RIA indicates that, for a region designated as the Eastern U.S., EPA predicted that these unknown controls would need to achieve NO_x emission reductions of 150,000 tons per year for the Dallas, Houston, greater New York City, and Washington, D.C. areas to meet a 70 ppb NAAQS.[22] For a 65 ppb ozone NAAQS, EPA

[18] RIA at 4-7, 4-16, 4A-2.
[19] RIA at 4-7, 4-16, 4A-2.
[20] RIA at 4-7, 4-17, 4A-2.
[21] RIA at 4-21.
[22] RIA at ES-9.

predicted that the NO_x reductions from unknown controls would need to reach 750,000 tpy for the Eastern U.S. to attain by 2025.

The Clean Air Act allows states to assume that future technology will support attainment of the ozone NAAQS.[23] However, the statute only expressly authorizes this approach for an area that is classified as "extreme" nonattainment, which historically has only applied to certain parts of California.

4. Implementation Timing

Under the Clean Air Act, a revision to the ozone NAAQS triggers an array of deadlines that are tied to designating and classifying all areas of the U.S. and then bringing any nonattainment areas into attainment of the NAAQS. Selected deadlines are presented chronologically below:

a. October 1, 2015 - final decision on revising the ozone NAAQS

The EPA Administrator is anticipated to sign and promulgate her final decision on whether to revise the ozone NAAQS, and if so to what level, by October 1, 2015. EPA has publicized this deadline,[24] which is a modification to the 5-year statutory schedule resulting from litigation.[25] EPA last revised the ozone NAAQS in 2008.[26]

b. October 2016 - states recommended designations

If the NAAQS is revised, each state's governor would submit that state's recommended designations and boundaries for areas as attainment, nonattainment, and unclassifiable by October 2016.[27] The Clean Air Act provides that such recommendations shall be made by "the Governor of each State" and shall be submitted "[b]y such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard."[28]

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[23] *See* 42 U.S.C. § 7511a(e)(5).

[24] *See, e.g.*, 79 Fed. Reg. at 75,354 ("The EPA intends to issue its final action promulgating a revised O_3 NAAQS or determine that it is not necessary to do so in October 2015."); Anna Marie Wood, Director, Air Quality Policy Division, EPA, *NAAQS and Other CAA Implementation Updates* (Clean Air Act Advisory Committee Meeting, Apr. 2015) at 9.

[25] *See* Order Granting Plaintiffs' Motion for Summary Judgment and Denying Defendant's Motion for Summary Judgment, *Sierra Club v. EPA*, No. 4:13-cv-02809 (N.D. Cal. Apr. 30, 2014). Section 109 of the statute provides in part: "Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph." 42 U.S.C. § 7409(d)(1).

[26] *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008) (promulgating 75 ppb ozone NAAQS codified at 40 C.F.R. § 50.15).

[27] The nominal deadline would presumably be adjusted from a precise 1-year deadline in light of the fact that October 1, 2016 is a Saturday.

[28] 42 U.S.C. § 7407(d)(1)(A).

c. May or June 2017 - EPA distributes 120-day letters

In May or June of 2016,[29] EPA would distribute "120-day letters" advising states of EPA's intended designations of areas within each state, including any modifications EPA intends to make to the states' recommendations. By statute, EPA is not specifically obligated to notify states if the agency will accept their recommended designations. However:

> Whenever the Administrator intends to make a modification [from the state's recommendation], the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto.[30]

EPA's practice has been to distribute 120-day letters even when the agency is not departing from a state's recommended designation.[31] In connection with the 120-day letters, EPA has also historically accepted public comment on its intended designations, although the designation process is not subject to standard Administrative Procedure Act processes.[32]

d. October 2017 - EPA promulgates initial designations

EPA would be expected to promulgate initial designations for all areas of the U.S. for a revised ozone NAAQS by October 2017.[33] EPA generally must promulgate initial area designations under a new NAAQS "in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard."[34] EPA may extend its deadline by an additional year, but only "in the event the Administrator has insufficient information to promulgate the designations."[35]

e. Attainment deadlines

Areas designated nonattainment will be classified and assigned attainment deadlines according to their relative ozone levels. The Clean Air Act provides for five

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[29] As indicated below, the 120-day letters must be distributed at least 120 days before EPA promulgates a designation that modifies a state's recommendation. Assuming EPA seeks to promulgate designations close to the nominal deadline noted below of October 1, 2017, the 120-day letters would be distributed in late May or early June 2017.

[30] 42 U.S.C. § 7407(d)(1)(B)(ii).

[31] *See, e.g.*, 76 Fed. Reg. 78,872 (Dec. 20, 2011) (announcing EPA's intended designations and a public comment period thereon for the 2008 ozone NAAQS).

[32] *See* 42 U.S.C. § 7407(d)(2)(B) ("Promulgation or announcement of a designation under paragraph (1), (4), or (5) shall not be subject to the provisions of sections 553 through 557 of Title 5 (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.").

[33] As indicated, the deadline is nominally 2 years after the October 1, 2015 NAAQS promulgation date. However, October 1, 2017 is a Sunday.

[34] 42 U.S.C. § 7407(d)(1)(B)(i).

[35] *Id.*

classifications of ozone nonattainment areas with corresponding timelines to attain.[36] Consistent with past practice, EPA is likely to calculate the timelines from the effective dates of the nonattainment classifications, which are expected to be at the end of 2017.[37] Assuming the classifications became effective December 31, 2017, the classifications and attainment dates can be anticipated to be as follows:

Nonattainment classification	**Attainment date (assuming December 31, 2017 effective date of classification)**	**Data that would be used to judge timely attainment[38]**	**Statutory language on attainment date[39]**
Marginal ozone nonattainment area	December 31, 2020	2018-2020	"3 years after November 15, 1990"
Moderate ozone nonattainment area	December 31, 2023	2021-2023	"6 years after November 15, 1990"
Serious ozone nonattainment area	December 31, 2026	2024-2026	"9 years after November 15, 1990"
Severe ozone nonattainment area	December 31, 2032	2030-2032	"15 years after November 15, 1990"
Extreme ozone nonattainment area	December 31, 2037	2035-2037	"20 years after November 15, 1990"

[36] 42 U.S.C. § 7511(a)(1) & Tbl. 1.

[37] Although EPA's deadline to "promulgate" designations would be October 2017, there is typically a delay between promulgation of EPA actions and their publication in the Federal Register, and a further delay between Federal Register publication and the rule becoming effective.

[38] In some circumstances, an area can qualify for up to 2 years of extensions on its attainment date. 42 U.S.C. § 7511(a)(5); 40 C.F.R. § 51.1107.

[39] November 15, 1990 was the day of the 1990 Clean Air Act amendments that set the classifications and attainment dates for the NAAQS in place at the time. EPA has since then, and presumably will continue in the future, to translate the applicable statutory language to run beginning on the effective date of nonattainment designations and classifications for a new NAAQS. *See, e.g.*, 40 C.F.R. § 51.1103(a) & Tbl. 1 (same, for the 2008 ozone NAAQS).

5. Basis for designations

a. State recommendations based on 2013-2015 air quality data

States are expected to rely on 2013-2015 air quality monitoring data in support of their recommended designations. EPA has observed that "State Governors (and tribes, if they choose) would likely use air quality data from the years 2013 to 2015 as the basis for their recommendations" on nonattainment area designations.[40] These would be the three most recent years of certified air quality monitoring data available at the time of the states' October 2016 recommended designations.

b. EPA action based on 2014-2016 air quality data

Areas are expected to be designated on the basis of the most recent 3 years[41] of certified, quality-assured data available to EPA at the time of promulgating initial designations.[42] In light of EPA's October 2017 designation deadline, and the because states generally must certify their ambient air quality monitoring data for a calendar year by the following May 1,[43] EPA's designations may rely on regulatory air quality monitoring data collected for the 2014-2016 averaging period.

If EPA lacks sufficient information to designate an area by its October 2017 deadline, the statute authorizes EPA to extend its designation deadline by an additional year,[44] or until October 2018. In this event, EPA would presumably have access to state-certified 2015-2017 air quality data to form the basis of its designations.

c. Exceptional events

States may be able to use the "exceptional events rule" to adjust the air quality monitoring data available to EPA in making ozone nonattainment designations.

i. Exceptional events rule

Under statutory direction to provide procedures for a state to seek the exclusion of unusual air quality data in determining NAAQS compliance,[45] EPA promulgated the exceptional events rule in 2007[46] to provide that certain exceptional events may be excluded from NAAQS compliance considerations. In this context:

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[40] 79 Fed. Reg. at 75,354.
[41] *E.g.*, 79 Fed. Reg. at 75,293 ("In this review, the Administrator considers the extent to which the available evidence and/or information continue to support the appropriateness of a standard with the current form, defined by the 3-year average of annual 4th-highest 8-hour daily maximum O_3 concentrations.").
[42] EPA has in the past rejected use of non-regulatory or uncertified air quality monitoring data as a basis for ozone designations, and has been upheld in doing so by the D.C. Circuit. *Mississippi Commission on Environmental Quality v. EPA*, -- F.3d ----, 2015 WL 3461262 (D.C. Cir. June 2, 2015).
[43] *See* 40 C.F.R. § 58.15(a)(2) ("Beginning in 2010, the annual data certification letter is due by May 1 of each year.").
[44] 42 U.S.C. § 7407(d)(1)(B)(i).
[45] 42 U.S.C. § 7619(b)(3)(B)(iv).
[46] 72 Fed. Reg. 13,580 (Mar. 22, 2007).

> Exceptional event means an event that affects air quality, is not reasonably controllable or preventable, is an event caused by human activity that is unlikely to recur at a particular location or a natural event, and is determined by the Administrator in accordance with 40 CFR 50.14 to be an exceptional event. It does not include stagnation of air masses or meteorological inversions, a meteorological event involving high temperatures or lack or precipitation, or air pollution relating to source noncompliance.[47]

Before data associated with an exceptional event can be excluded from NAAQS compliance considerations, the state generally must flag the data by July 1 of the following calendar year,[48] and submit a demonstration to EPA within 3 years of the event or 12 months before EPA must make a regulatory decision that depends on the data[49] (notably, EPA has proposed to adjust these deadlines to allow states to flag data that may be considered for the new ozone NAAQS but would not have qualified as an exceptional event prior to the new standard[50]). The demonstration must go through public comment and must show that:

- There is a clear causal relationship between the data and the claimed exceptional event;
- The claimed exceptional event is associated with a measured air quality reading in excess of normal historical fluctuations, including background; and
- There would be no NAAQS exceedance or violation but for the claimed exceptional event.[51]

ii. Past use of exceptional events

As a general matter, states have not made widespread use of the exceptional events rule. At the same time, EPA's past approvals of state exceptional events claims have involved substantial work efforts by the states. For example, a review of the 3 examples of successful ozone exceptional events demonstrations on EPA's website[52] shows that the states submitted voluminous and highly technical demonstrations comprising 70 pages (Wyoming 2012 stratospheric intrusion episode), 247 pages (Kansas April 2011 episode associated with fires), and 1,012 pages (Sacramento 2008 wildfire episodes).

Use of the exceptional events rule may increase if the ozone standard is revised, as more areas will likely measure air quality above the NAAQS and fewer control options will be readily available to reduce ozone levels. In addition, EPA officials have reported that they are

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[47] 40 C.F.R. § 50.1(j).
[48] 40 C.F.R. § 50.14(c)(2)(iii).
[49] 40 C.F.R. § 50.14(c)(3)(i).
[50] 79 Fed. Reg. at 75,353-58.
[51] 40 C.F.R. § 50.14(c)(3)(iv).
[52] http://www.epa.gov/ttn/analysis/exeventstable.htm (last accessed Jul. 11, 2015).

working on revising the exceptional events rule and providing guidance to streamline the exceptional events process.[53]

6. SIP development considerations

For many areas designated nonattainment for the new ozone NAAQS, the state will be required to develop a state implementation plan (SIP) demonstrating how the area will attain the NAAQS by its attainment deadline.[54] Some states may seek to use Clean Air Act procedures for internationally transported emissions and for "rural transport areas" as outlined below.

a. Internationally transported emissions

Clean Air Act section 179B provides targeted relief to an ozone nonattainment area if the state "establishes to the satisfaction of the Administrator" that the nonattainment area would "attain and maintain the relevant national ambient air quality standards by the attainment date . . . but for emissions emanating from outside of the United States."[55] The state must develop a SIP, continue to impose nonattainment area permitting requirements on sources within the area, and otherwise implement Clean Air Act programs for nonattainment areas. However, the requirements are relaxed in two ways:

- First, the SIP need not demonstrate that the area will attain the NAAQS. Rather, the state must only demonstrate that the SIP "would be adequate to attain" but for internationally transported emissions.[56]

- Second, the area need not attain by its attainment deadline. Such an area is exempted from otherwise-applicable Clean Air Act provisions that would reclassify the area to a more stringent nonattainment status or impose penalty fees for the failure to attain.[57]

Section 179B has only been invoked rarely,[58] and EPA has not promulgated regulations addressing its use. Thus, use of the provision has been considered by EPA regional offices on a case-by-case basis. Section 179B may become more important as the ozone NAAQS becomes more stringent and available local controls are exhausted.

b. Rural transport areas

The Clean Air Act allows EPA to treat certain ozone nonattainment areas, denoted as "rural transport areas," in a manner less stringent than their nonattainment classification would otherwise require.

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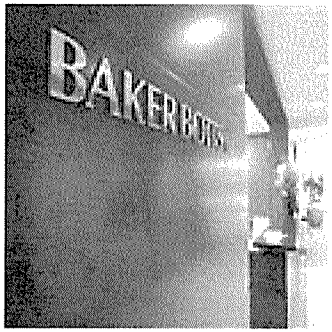
[53] *See, e.g.*, EPA, *Exceptional Events Updates* (WESTAR Spring Meeting, Apr. 2015).
[54] *See generally* 42 U.S.C. § 7511a.
[55] 42 U.S.C. § 7509a(a)(2), (b).
[56] 42 U.S.C. § 7509a(a).
[57] 42 U.S.C. § 7509a(b). The cross-reference in the statute appears to contain a typographical error but would be logically construed to reference 42 U.S.C. § 7511(b)(2) and (4).
[58] *E.g.*, 79 Fed. Reg. at 75,385 (identifying only three areas that have used Clean Air Act international transport demonstrations).

An area qualifies as a rural transport area based on whether it is outside of a metropolitan statistical area,[59] and EPA's judgment about the area's emission sources:

> The Administrator may treat an ozone nonattainment area as a rural transport area if the Administrator finds that sources of VOC (and, where the Administrator determines relevant, NO_x) emissions within the area do not make a significant contribution to the ozone concentrations measured in the area or in other areas.[60]

If EPA determines that the area qualifies as a rural transport area, its SIP obligations are limited to those of a marginal ozone nonattainment area.[61] "The only requirements that would apply, regardless of the level of O_3 air quality, would be NNSR [nonattainment permitting] (at the Marginal major source threshold and offset ratio), conformity requirements associated with a nonattainment designation, and the emission inventory and source emission statement requirements."[62]

[59] 42 U.S.C. § 7511a(h)(1).
[60] 42 U.S.C. § 7511a(h)(2).
[61] 42 U.S.C. § 7511a(h)(1).
[62] 79 Fed. Reg. at 75,384.



Implementing the 2015 Ozone NAAQS

Zach Craft

August 6, 2015

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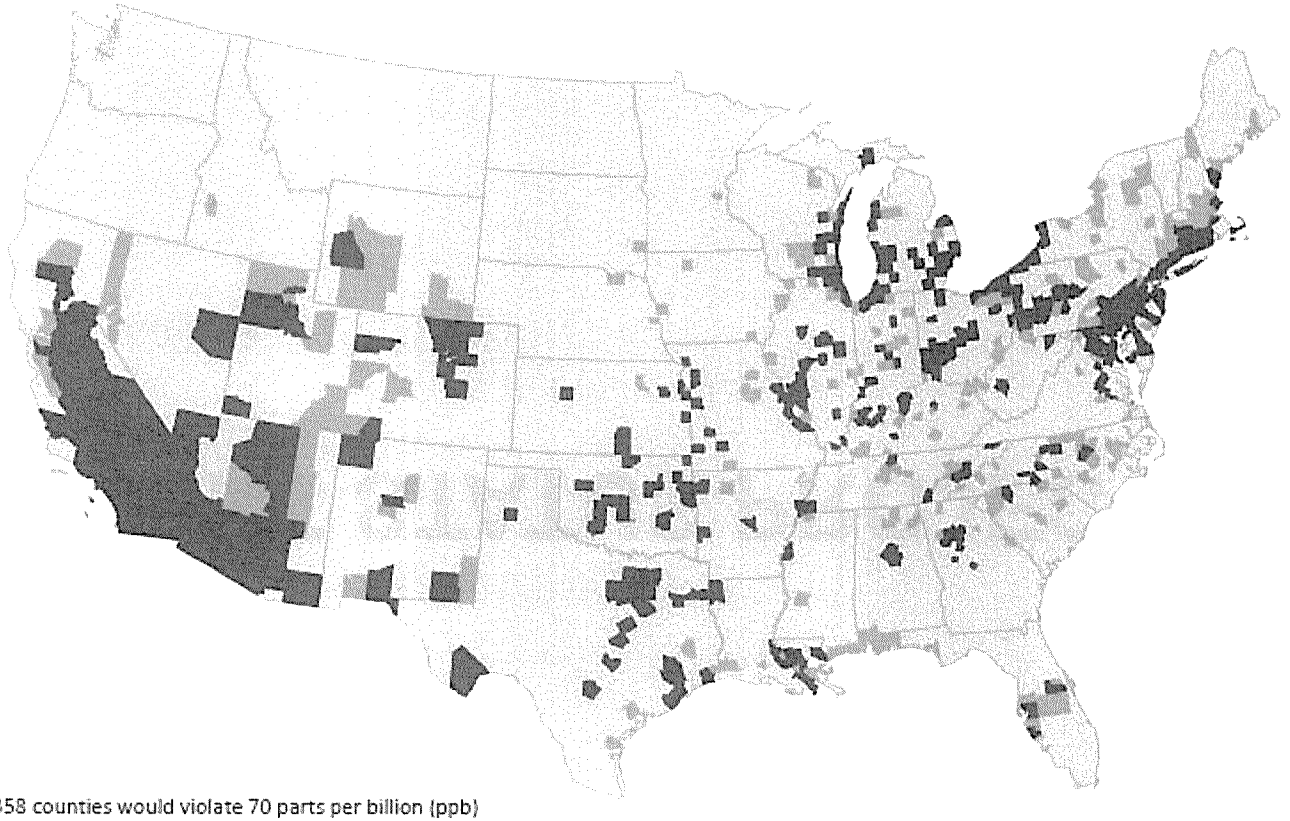
Ozone NAAQS: Overview

- **Attainment Status**
- **Controls**
- **Other Implementation Notes**

ATTAINMENT STATUS PROJECTIONS

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Measured ozone above proposed standards (70, 65 ppb) 2011-2013 (EPA)



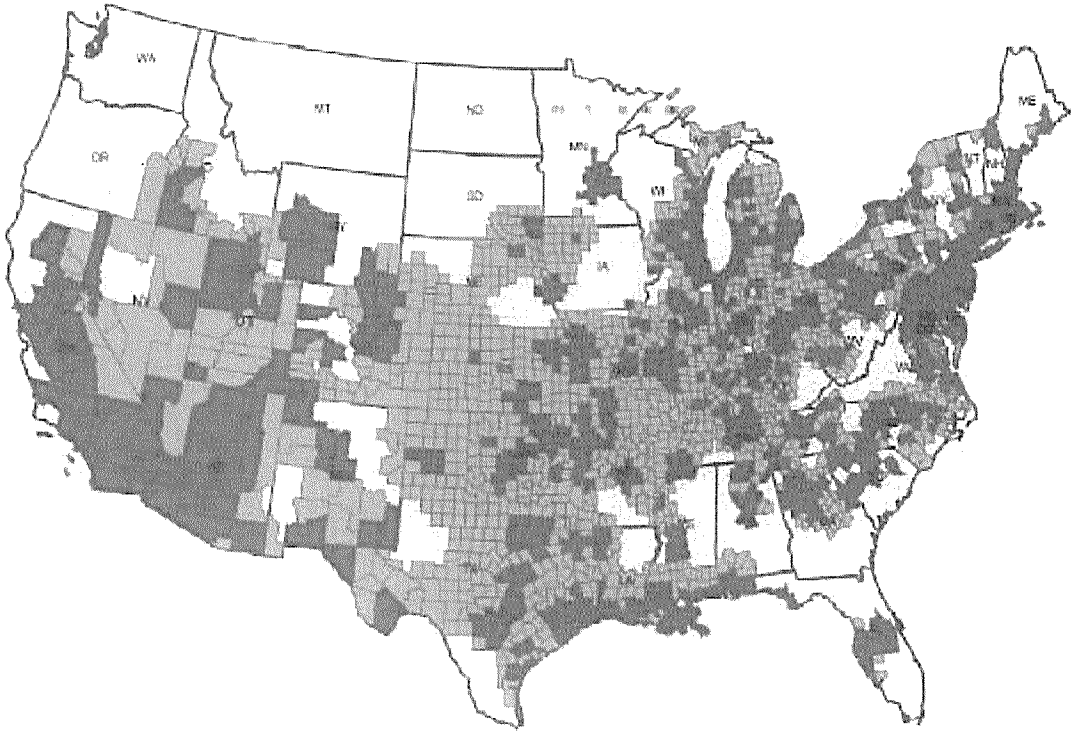
358 counties would violate 70 parts per billion (ppb)

200 additional counties would violate 65 ppb for a total of 558

Based on 2011 – 2013 monitoring data

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Projected 8-Hour Nonattainment (65 ppb) 2011 - 2013 (URS)



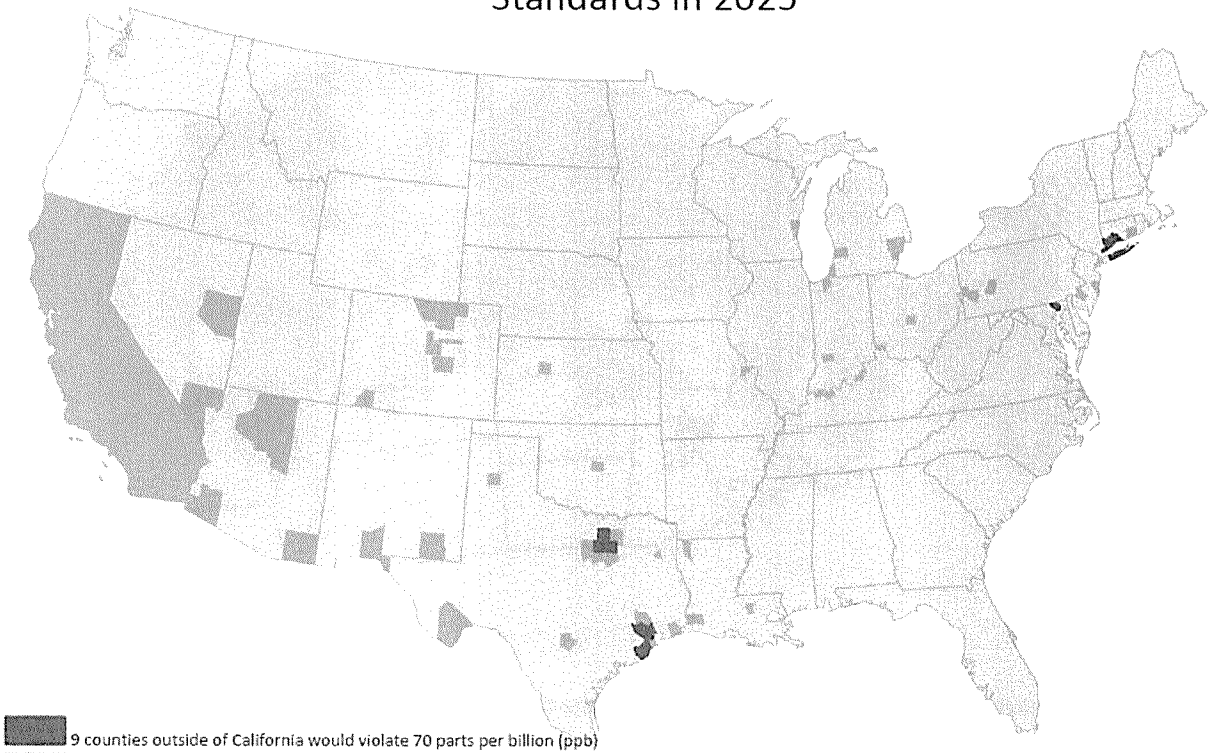
Monitored CBSAs and rural counties that would be violating a 65 ppb standard

Unmonitored areas that are anticipated to violate a 65 ppb standard based on spatial interpolation

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EPA-projected ozone in 2025

EPA Projects Most Counties Would Meet the Proposed Range of Standards in 2025



9 counties outside of California would violate 70 parts per billion (ppb)

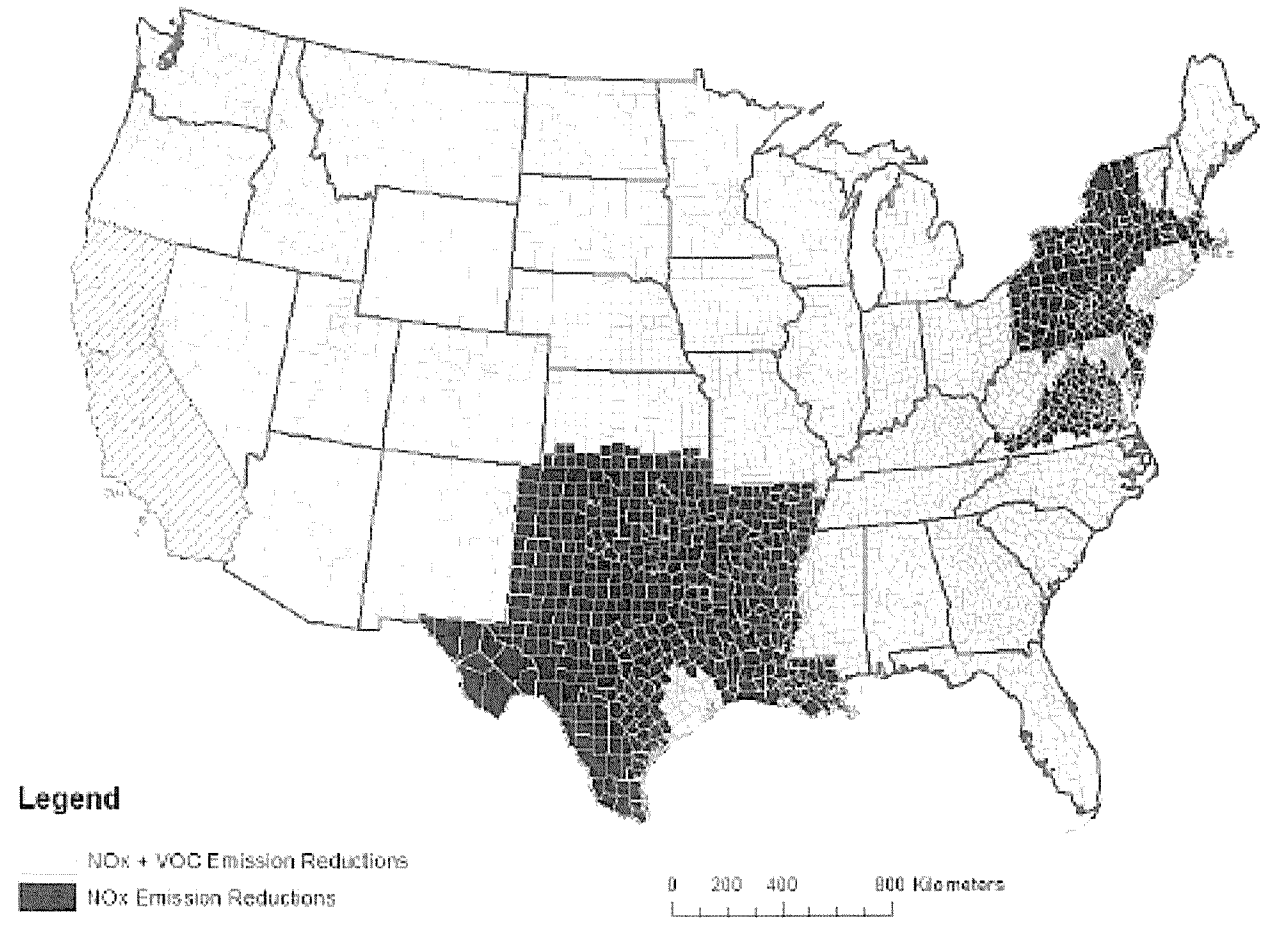
59 additional counties outside of California would violate 65 ppb for a total of 68

Because several areas in California are not required to meet the existing standard by 2025 and may not be required to meet a revised standard until sometime between 2032 and 2037, EPA analyzed California separately. Details are available in the Regulatory Impact Analysis for this proposal.

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CONTROLS TO ATTAIN

EPA-modeled emission reductions - 70 ppb



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Annual NOx Emissions Reduction (%) Proposed 70 ppb from Baseline

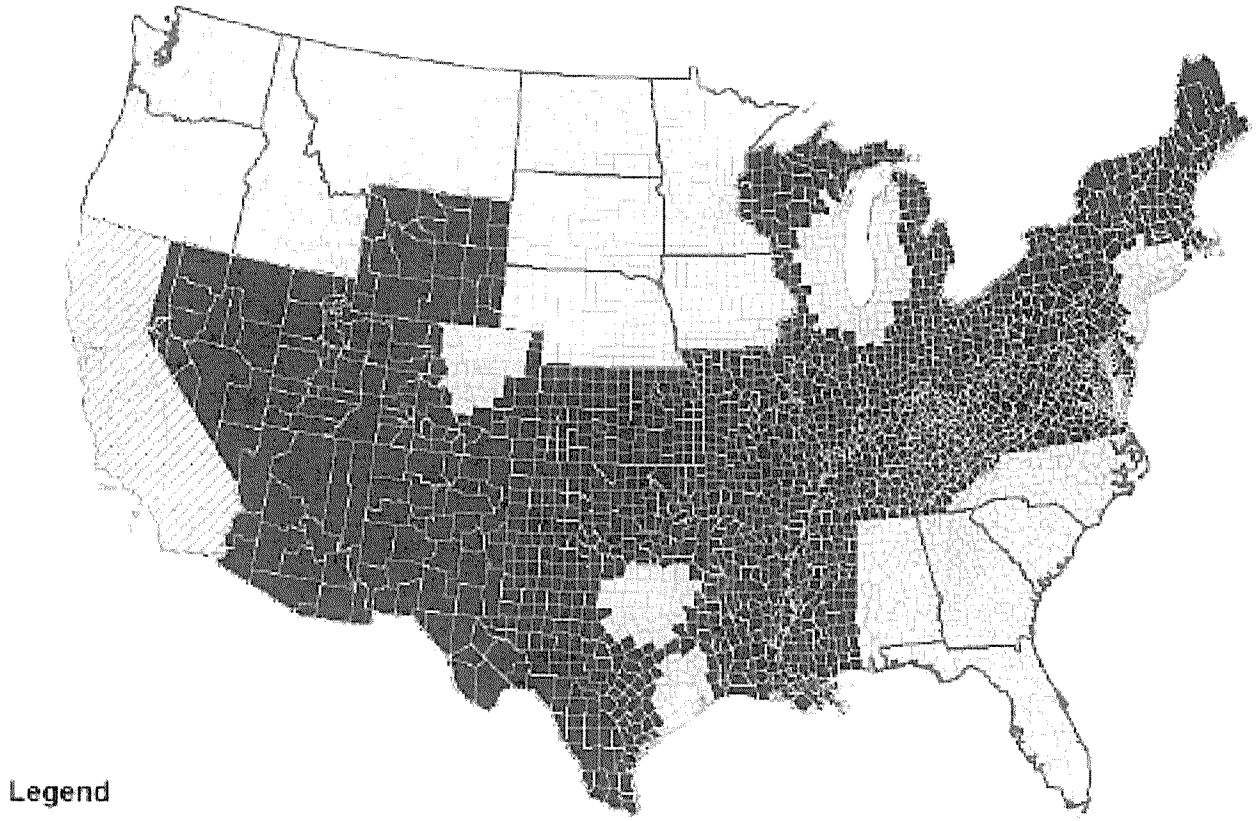


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"Unknown" Control NOx Emission Reduction (%) Proposed 70 ppb from Baseline

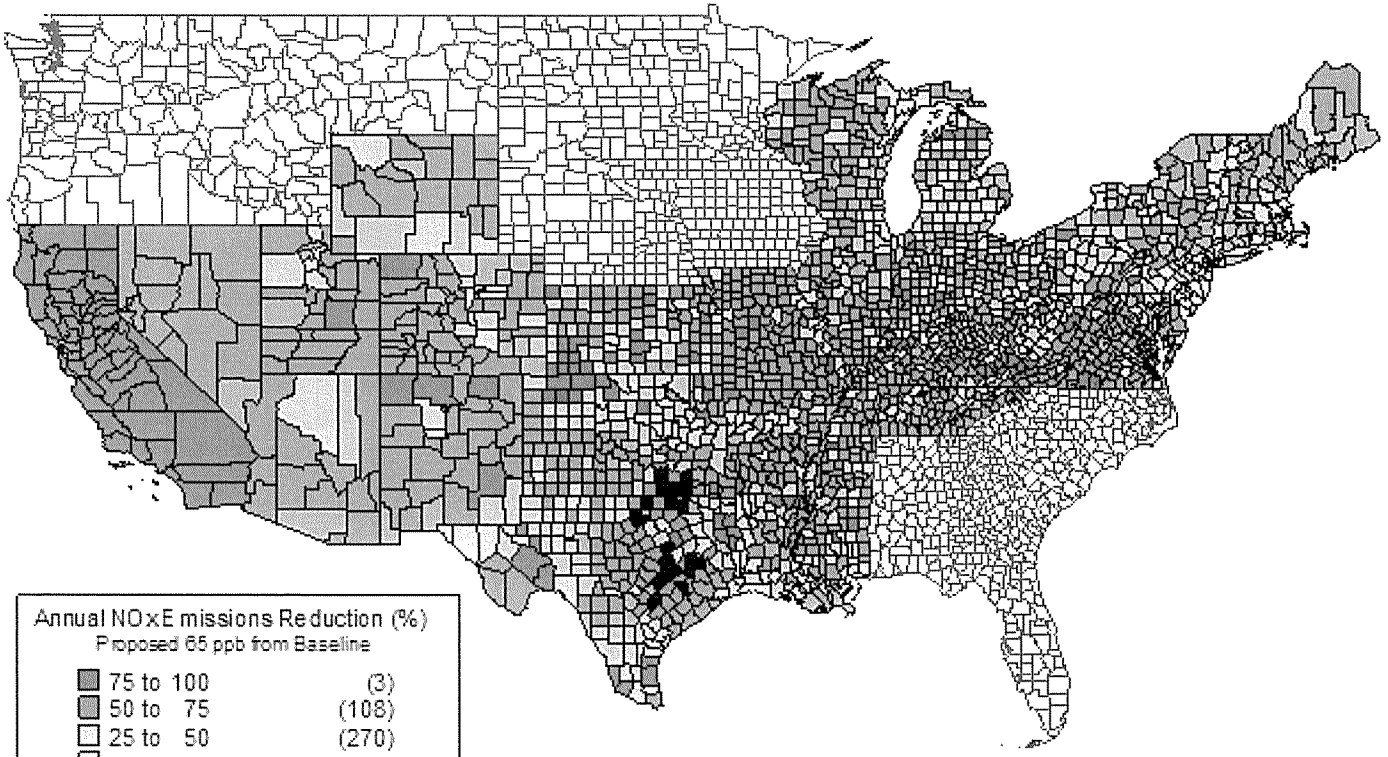


EPA-modeled emission reductions - 60-65 ppb



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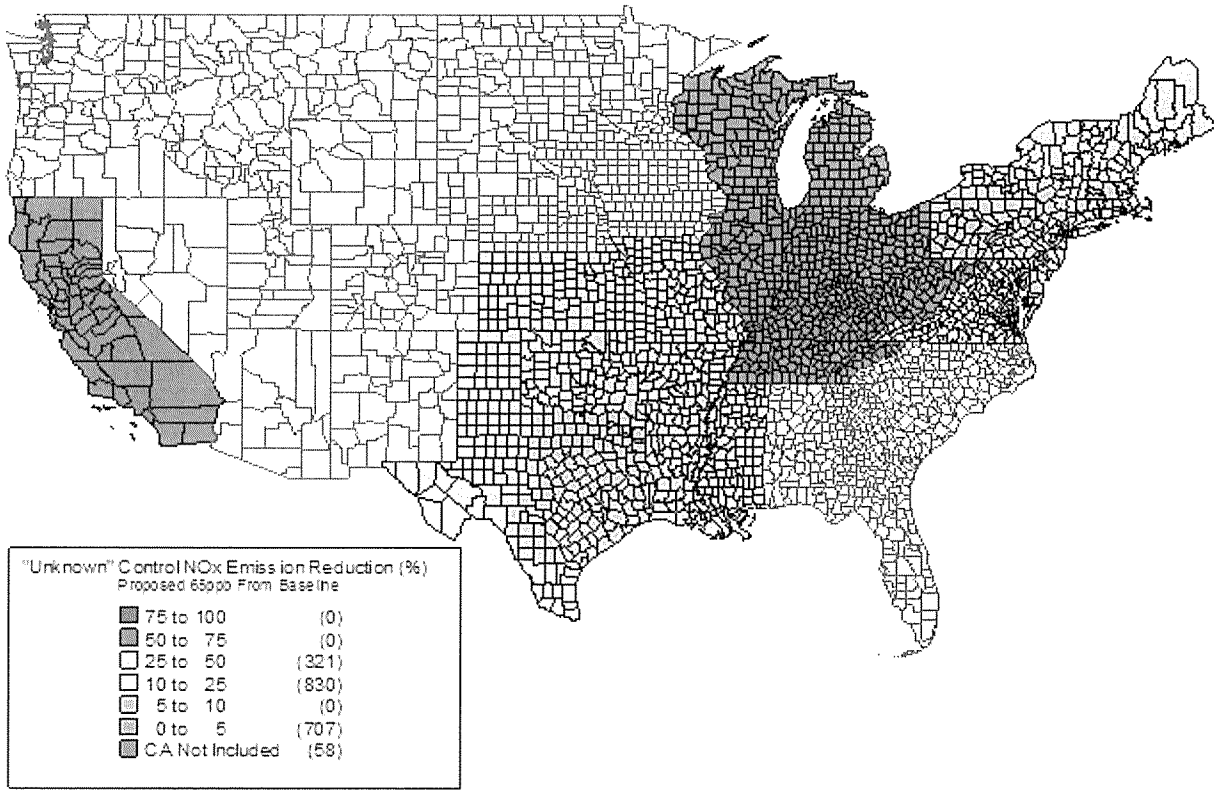
Annual NOx Emissions Reduction (%) Proposed 65 ppb from Baseline



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"Unknown" Control NOx Emission Reduction (%) Proposed 65 ppb From Baseline

Sub-regional magnitude of unknown NOx emission reduction (%) from baseline levels to achieve alternate standard of 65 ppb



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IMPLEMENTATION

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Implementation Timing

TIMING	EVENT
2013	Air Quality Monitoring
2014	Air Quality Monitoring
October 2015	Final Rule
October 2016	States Submit Area Designations (based on 2013-2015 air quality data)
June 2017	EPA Responds to States in "120-day letters"
October **2017 (possible 1 year extension)**	Final Area Designations (based on 2014-2016 air quality data)
October 2018	Infrastructure SIPs due Final Area Designations (based on 2015-2017 air quality data)
October 2020-2022	Nonattainment area SIPs due
2021 (est.)	Interstate transport SIP/FIP

Opportunities

- **Designation**
  - Exceptional events
- **SIP**
  - Rural transport
  - International transport
- **Permitting**

What years will be used to designate areas?

- **2013 - 2015** — **States use for designation**
- **2014 - 2016** — **EPA uses for notification**
- **2017** — **Possible, if insufficient information is available for 2014-2016**

Designation Considerations

- **Exceptional Event Exclusion**
  - States can request to exclude data associated with event-influenced exceedances of a NAAQS (July 1)
  - EPA intends to develop guidance for wildfires that could affect ambient ozone concentrations

SIP Considerations

- **Rural Transport Areas**
  - EPA may determine a nonattainment area can be designated as a RTA
  - Deemed to have fulfilled all ozone related planning and control requirements if it meets "marginal" requirements

- **CAA 179B International Transport**
  - Attainment "but for" emissions originating from outside U.S.
  - States avoid sanctions

Grandfathering

- **EPA's Proposal same as $PM_{2.5}$**
  - Completeness determination
  - Public notice

- **Incentive to apply for projects on the drawing board**

Permitting Considerations

October 1, 2015 = New Ozone Standard Promulgated
Effective: December 2015

- **Current Nonattainment Areas:**
  - LAER
  - Offsets
- **Areas Over New Standard:**
  - Still PSD but
  - Must demonstrate will not "cause or contribute" to NAAQS violation (CAA 165)
  - Unless grandfathered

Questions?

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Education and Honors

J.D., Columbia Law School, 2009

Editor, *Columbia Journal of European Law*, 2007-2009
Harlan Fiske Stone Scholar, 2007-2008

B.A. (*summa cum laude*), economics, Emory University, 2006

Court Admissions and Affiliations

State Bar of Texas

Houston Bar Association
Environmental Law Section

Zachary Craft's practice focuses on a variety of environmental matters. He has worked on numerous federal and state regulatory issues, environmental litigation and transactional matters. Much of his work addresses the needs of the business community concerning governmental regulation of air pollution.

REPRESENTATIVE MATTERS

- Industry stakeholder coalition – litigation and advocacy relating to implementation of Clean Air Act penalty fee program on industrial facilities
- Industry stakeholder coalition – advocacy on setting ozone nonattainment area boundaries
- Chemical company – representation at Superfund sites
- Coalition of terminal companies – administrative comments development on state VOC control rulemaking
- Electric power company – counseling on air permitting issues including projected actual emissions analysis, demand growth exclusion principle and "Routine Maintenance, Repair and Replacement" exemption from permit requirements
- Manufacturing company – assistance in connection with administrative enforcement relating to National Emissions Standards for Hazardous Air Pollutants compliance
- Midstream gas processing company – advice and assistance obtaining revised New Source Review and Title V authorizations in severe ozone nonattainment area
- Offshore drilling company – environmental due diligence in corporate merger
- Oil company – compliance audit and associated counseling on applicability of federal New Source Performance Standards to refinery wastewater systems
- Oil and gas exploration company – compliance counseling on hydraulic fracturing issues

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- Oil and gas production company – assistance with EPA Audit Policy Disclosures regarding 112(r) Risk Management Plan issues
- Oil and gas production company – assistance with response to EPA subpoena
- Recycling facility – assistance and advocacy regarding revised criteria pollutant nonattainment area boundaries
- Chemical company – defense against enforcement action alleging cap-and-trade program noncompliance

PUBLICATIONS, SPEECHES AND PRESENTATIONS

- Trends in Greenhouse Gas BACT Review," American Fuel & Petrochemical Manufacturers Environmental Conference, October 2014 (Matt Kuryla, co-author)
- "Introduction to Houston - Galveston- Brazoria Area (HGB) Mass Emissions Cap and Trade(MECT), Emission Reduction Credits (ERCs), and Discrete Emission Reduction Credits (DERCs) Programs," EUCI Webinar, October 2013 (Matt Kuryla and Mike Taylor, co-presenters)
- Shale Production Air Emissions – Key Legal Developments," EM Magazine, June 2012 (Matt Kuryla, co-author)
- "EarthJustice Petition to Regulate E&P Chemicals under TSCA and EPA's Response," presentation to Houston Bar Association, Environmental Law Section, December 2011
- "Flare Rules: EPA and TCEQ Initiatives," presentation to Southeast Texas Environmental Managers workshop, May 2011
- "Environmental Justice 2.0-An Enforcement Priority," Environmental Law360, February 2010 (Scott Janoe, co-author)

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Air Pollution

Enforcement

Based on the numbers alone, businesses and other members of the community regulated by the Environmental Protection Agency ought to be breathing a little easier. With news of diminished budgets and lowered enforcement expectations, some might be tempted to expect a corresponding decline in enforcement risk, perhaps even a dramatic one. Not so fast.

Clean Air Act: New Developments That Are Redefining the Enforcement Landscape

ALEC C. ZACAROLI

In its own strategic plan, the Environmental Protection Agency anticipates a decline of more than 30 percent in federal inspections and evaluations during the next five years[1] and also expects to bring 40 percent fewer civil judicial and administrative enforcement cases during that time.[2] Compared with decades of robust enforcement, which included industrywide enforcement initiatives that generated global settlements carrying multimillion-dollar penalties and obligations, it appears that the EPA's enforcement efforts are due to ease up a little and perhaps even allow the regulated community to relax a little too. Not so fast.

In light of certain recent developments, the chances that a business or other regulated entity will face a Clean Air Act enforcement action may be—counterintuitively—growing, not shrinking. These developments, which appear to reflect a change in the agency's approach to enforcement, include a heavy emphasis on the development and deployment of monitoring technologies, the promulgation of regulations that will facilitate the use of air quality data for enforcement purposes and the closing of safe harbors (or loopholes, depending on one's perspective), such as the startup, shut-down and malfunction (SSM) exemption or defense. As a result of these developments, a diminishing level of activity at the EPA's Office of Enforcement and Compliance Assurance (OECA) will not necessarily equate to a drop-off in enforcement activity; it simply marks a shift in who will build and bring the cases. In this article, we briefly explore these recent developments, how they are changing the enforcement landscape and what companies can do to prepare.

[1] *See Draft FY 2014–2018 EPA Strategic Plan*, Nov. 19, 2013, p. 82, 78 Fed. Reg. 69,412. (Anticipating about 14,000 cases per year in FY 2014–2018 compared with 21,000 per year in FY 2005–2009.)

[2] *Id.* (Anticipating about 2,320 cases per year in FY 2014–2018 compared with 3,900 cases per year in FY 2005–2009).

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Deputizing the Public

On Oct. 2, OECA Assistant Administrator Cynthia Giles shared what has become a familiar refrain for the agency's top cop. Speaking at a forum sponsored by the Environmental Law Institute, she walked through the five components of the agency's Next-Generation compliance initiative: develop rules "with compliance built in"; advance monitoring technologies; perform e-reporting; promote "transparency"; and create "innovative" enforcement. As we will explore further, three of these objectives—built-in compliance, transparency and innovative enforcement—are code words for a plan to increase the overall enforcement response by arming the public with monitoring capability and establishing limits and standards that are enforceable using the data generated through that and other increased monitoring.

The first component, increasing the scrutiny of companies by promoting the availability of relatively inexpensive handhold monitors, serves as the backbone to this strategy. As Giles observed, communities that have the ability to gather air quality data create a "big motivator" for companies to more closely monitor their own emissions. The EPA's draft Next-Generation Air Monitoring (NGAM) strategy[3] sheds light on the agency's plans. It sets three goals for the agency's NGAM efforts:

- "Promote development of affordable, near-source fence-line monitoring technologies and sensor network-based leak detection systems for selected hazardous air pollutants and black carbon to support new regulatory strategies and [for] enforcement and compliance purposes."

- "Supplement air quality monitoring networks through development of low-cost, reliable air quality monitoring technology for measuring criteria air pollutants, such as nitrogen dioxide, carbon monoxide, ozone and particulate matter."

- "Support environmental justice communities and citizen efforts to measure air pollution in local areas."[4]

One need not read much between the lines to see that the central goal of this strategy essentially is to deputize citizens and other groups and arm them with monitoring equipment. This goal also is reflected in the EPA's "Air Sensor Guidebook," which is designed to provide the public with information on low-cost air pollution sensors. As the guidebook notes, "[P]otential users include individuals such as sensor developers, citizen alliances, teachers and students; community organizations such as neighborhood alliances and environmental justice groups; and federal, tribal, state and local air quality agencies."[5] And as far as the monitoring equipment advances needed to implement this strategy are concerned, agency officials believe the technology is largely there.

Scientists with the EPA's Office of Research and Development, Office of Air and Radiation and OECA, for instance, have observed: "While not all monitoring objectives (e.g., National Ambient Air Quality Standards [NAAQS] compliance monitoring) can be met with current air pollution sensor technologies, some monitoring objectives can or likely will be achievable in the near future, given that sensor packages with acceptable performance for a certain application are being developed."[6] They note, for instance, that sensor technologies "might be used in air quality management activities [such as] (1) supplementing routine ambient air monitoring networks, (2) expanding the conversations with communities, (3) enhancing source compliance monitoring and (4) monitoring personal exposures."[7]

So while the EPA may predict an overall drop in the number of enforcement cases it may bring in coming years, the agency is far from abandoning an aggressive enforcement strategy. Rather, the EPA is shifting part of its enforcement responsibility to a broader network of entities and giving them the tools to do its enforcement bidding. As explained below, when paired with other developments, this shift could have significant consequences for the regulated community.

Bottom line: As a result of the EPA's focus on promoting the development and distribution of monitoring technologies, companies and other regulated entities should expect increased monitoring and associated scrutiny from a broader array of sources, including environmental groups, citizen groups and fence-line communities.

Fitting the Crime to the Evidence

Although regulated entities are likely to see more scrutiny of their operations through greatly increased monitoring activity, unless companies routinely grant the public access to their facilities, most air quality monitoring likely will occur outside the fence line (keeping in mind, of course, the very real possibility that employees could conduct such monitoring as well). And while monitoring ambient air quality in the immediate vicinity of a facility can generate substantial data, this information may not be all that helpful in proving a violation of an emissions limit at a particular unit as, for instance, a continuous emissions monitoring system (CEMS) unit might do. The data, in other words, might prove to be of limited value as evidence of an actual violation. It appears that the EPA has thought of this issue and has proposed at least one solution: a fence-line standard.

The concept of fence-line monitoring—requiring companies to set up passive air quality monitoring systems around the perimeter of their facilities—has crept into a handful of EPA proposals recently. As Giles has further noted, it also has become an increasingly common component demanded by the EPA and the Department of Justice for consent decrees and other settlements. On the regulatory side, it has come up predominantly in the context of the air toxics provisions of Section 112 of the Clean Air Act and, more particularly, in proposals implementing risk assessment and technology review (RTR) requirements of CAA § 112(d)(6) and (f). Fence-line monitoring, for instance, was included in RTR proposals for air toxics standards governing secondary lead smelting and ferroalloys produc-

[3] *Draft Roadmap for Next-Generation Air Monitoring*, U.S. EPA, March 2013.
[4] *Id.*
[5] *Air Sensor Guidebook*, U.S. EPA Office of Research and Development, June 2014.
[6] Synder, E.G., The Changing Paradigm of Air Pollution Monitoring, *Environmental Science & Technology*, 2013, Vol. 47, 11369–11377.
[7] *Id.*

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tion.[8] (The provisions were not finalized for secondary lead smelting, while the RTR for ferroalloys production is still at the proposal stage.)

The EPA's most recent proposal, however, may prove to be the game changer. On June 30, the EPA proposed an RTR rule for the petroleum refinery sector, in which the agency examined its existing maximum achievable control technology (MACT) standard for those sources.[9] Like others, the proposal includes a fence-line monitoring program. It also includes, however, a fence-line standard that, if exceeded, would trigger corrective action requirements.[10] In a nutshell, the proposal would: require refinery owners and operators to set up passive monitors at intervals around the refinery fence line; require refineries to collect two-week, time-integrated monitoring samples and both submit the data collected to the EPA and make it publicly available via the Internet; establish a fence-line standard for benzene (considered by the EPA as a viable surrogate for most refinery emissions) at 9 micrograms per cubic meter; and establish investigation and corrective action requirements for the refinery whenever monitoring demonstrates an exceedance of the standard.[11]

Significantly, the rule would not only create an ambient air standard that now can be measured and violated, notwithstanding the absence of any direct connection to actual emissions from regulated sources or activities, it also would shift the burden to the refiner to demonstrate that pollutant concentrations in fence-line ambient air are not the result of its activities. Refiners, rather obviously, ought to have substantial concerns with this proposal, not the least of which are: How does a refinery accurately account for off-site or other nonrefinery emissions that contribute to benzene levels at the fence line? And what are the burdens that root-cause investigations and corrective action requirements could impose, especially in light of the potentially significant opportunity for false positives? There also are significant questions with respect to how the EPA came up with the proposed fence-line limit for benzene, but that is an article for another day.

The important point for all regulated industries, however, is the precedent the EPA is attempting to set. The fence-line standard in the Petroleum Refinery MACT RTR proposal, if promulgated and not successfully challenged, likely will become standard for other sources as well. It could be adopted piecemeal (i.e., in other MACT standards as they are developed under CAA § 112(d); or reviewed and revised under CAA § 112(d)(6) or (f)); or the EPA could attempt to adopt broader standards, such as through the general provisions adopted to implement CAA § 111 and 112 (i.e., 40 CFR Part 60 and § 60.7(c) in particular; Part 63 and § 63.8 in particular). Once in place, these standards could provide a powerful enforcement tool to citizen groups, nongovernmental organizations (NGOs) and state and local officials, not to mention the EPA itself. They would have a limit that is directly enforceable using the type of air quality monitoring data now abundantly available, whether from the refineries themselves or from their own devices and efforts.

The bottom line: As the generation of emissions data and associated scrutiny of sources expands, opportunities for turning these data into an enforceable action also are growing.

Blocking Safe Harbors

Even in the absence of standards specifically designed to account for greater monitoring capability, advances and increases in the use of air quality monitoring could spell greater risk in light of other legal and regulatory developments. The recent demise of regulatory exemptions and defenses for excess emissions that occur during the SSM of equipment or emissions controls is a prime example. The EPA has long recognized the reality that it can be difficult, if not sometimes impossible, to avoid exceeding emissions limits when a unit starts up, shuts down or (naturally) when control equipment fails. In fact, the SSM exemption dates back to 1977, when the EPA determined that excess emissions during SSM periods do not constitute violations of new source performance standards under CAA § 111.[12] The agency also adopted the exemption for air toxics standards under CAA § 112 in 1994, requiring sources to develop and implement SSM plans designed to minimize emissions to the extent possible during these events.[13]

In 2008, however, the U.S. Court of Appeals for the District of Columbia Circuit vacated the SSM exemption that EPA provided in a rule promulgated pursuant to § 112, concluding that it was inconsistent with the definition of "emission standard" under the statute.[14] Noting that CAA § 112(d) requires the promulgation of "emissions standards," the court focused on the definition of "emission standard" under CAA § 302(k) and observed that it requires control of emissions on a "continuous basis." The court concluded that "[w]hen Sections 112 and 302(k) are read together. . .Congress has required that there must be continuous Section 112-compliant standards." It found that the general duty clause that EPA relied on to justify the SSM exemption in the rule did not amount to a "Section 112-compliant standard."[15]

In April, the D.C. Circuit dealt a second blow to policies designed to afford regulatory relief during SSM events when it rejected the EPA's creation of an affirmative defense for SSM events under an air toxics standard for Portland cement plants.[16] The court found that the SSM affirmative defense conflicted with the citizen suit provisions under CAA § 304(a) by attempting to define the scope of the private right of action created by that section. It noted, "Section 304(a) creates a private right of action, and as the Supreme Court has ex-

[8] 76 Fed. Reg. 29,057, 77 Fed. Reg. 559, 56 (2012) (Fence-line monitoring proposed as alternative to total enclosure requirement for secondary lead smelting facilities.); 76 Fed. Reg. 72,508 (Fence-line monitoring proposed as alternative to total enclosure for ferroalloys production).

[9] 79 Fed. Reg. 36,880.

[10] *Id.*

[11] 79 Fed. Reg. 36,880, 36, 923–27.

[12] *Sierra Club v. EPA*, 555 F.3d 1019, 1022 (D.C. Cir. 2008), *citing Standards of Performance for New Stationary Sources*, 42 Fed. Reg. 57,125 (Nov. 1, 1977)

[13] *Id., citing National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions*, 59 Fed. Reg. 12,408 (March. 16, 1994)

[14] *Sierra Club*, 551 F.3d at 1027–28

[15] *Id.* at 1027.

[16] *Natural Res. Def. Council v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014)

plained, 'The judiciary, not any executive agency, determines 'the scope'—*including the available remedies*—'of judicial power vested by' statutes establishing private rights of action."[17] In other words, unless an affirmative defense to a private cause of action is defined by statute, the EPA cannot simply create one. The practical upshot of this decision is that defendants will have to rely on the discretion of the courts in applying statutorily mandated factors set forth in CAA § 113 for determining penalties in citizen suit cases brought under the Clean Air Act. But the decision may have broader implications as well.

In September, in response to a petition by the Sierra Club, the EPA proposed rescinding its SSM policy with respect to affirmative defenses provided under state implementation plans (SIPs), notwithstanding that its approval of such SIP provisions has been upheld by at least two courts.[18] The Courts of Appeals for the Fifth and Ninth Circuits have found that the EPA's approval of affirmative defenses for malfunctions in SIPs or federal implementation plans (FIPs) falls within the deference afforded the agency under *Chevron v. NRDC*.[19,20] The agency's decision to follow the lead of the D.C. Circuit is an article all in itself, but for purposes of this analysis, the important consideration is that the EPA's proposal would require states to eliminate affirmative defenses adopted by at least 19 states in their SIPs and effectively bar states from adopting such defenses in the future.

As a result of these various actions, regulatory relief for SSM periods and events could be all but eliminated. This fact, combined with the prospect of vastly increased monitoring by a broader array of parties, could mean many facilities will face an increase in compliance issues and possible enforcement actions. As the EPA has historically understood, malfunctions of equipment are a given at some point in time. Not only will these events now constitute inexcusable violations, they will become so in an environment of much greater scrutiny.

The prospect of increased monitoring also should be considered in light of other historical developments with respect to the evidentiary proof available to determine CAA violations. More monitoring data, when combined with the EPA's "any credible evidence" (ACE) rule, for instance, could increase the number and expand the types of violations that agencies and private litigants can bring and possibly prove. The ACE rule specifically allows for the use of any credible evidence (beyond specified performance tests or other compliance parameters set through individual regulations) to prove a violation of a CAA standard or emissions limit. As a result, EPA, state and local agencies, and potentially private litigants, could have an easier time making a case in court. Furthermore, because the ACE rule became a state SIP requirement in 1997, state regulations may provide further opportunities for enforcement cases to be brought.[21] While there is case law providing that the federal ACE rule applies only to enforcement actions brought by the EPA, depending on how they are worded, this limitation may not apply to state SIPs.[22]

The bottom line: While the types of evidence available for proving violations of the Clean Air Act, or even just mounting an enforcement case, are growing, the defenses available for countering such actions are diminishing.

Preparing for a New Era of Enforcement

There are a number of moving parts to the EPA's evolving approach on Clean Air Act enforcement, any one of which could influence outcomes. To reach its full potential, the plan requires ongoing advances in monitoring technologies that make effective, inexpensive technologies more available. The plan also depends, to some extent, on the public's increased interest in air quality—although this is almost a given, considering both the prevalence of environmental groups and other NGOs interested in Clean Air Act enforcement and the availability of fee recovery under the CAA. And while increased monitoring alone likely will lead to some level of greater scrutiny of and potential enforcement actions against regulated entities, regulatory exposure will be further heightened by the EPA's ability to eliminate safe harbors and to promulgate new standards that are easier to enforce using the monitoring data likely to be generated by third parties. Ultimately, it is reasonable to expect an overall increase in enforcement activity when the EPA efforts are combined with those of states, local governments and private groups.

In light of these developments, there are at least three key things that companies can do to prepare. First, get involved in the regulatory process. Second, get to know your neighbors, if you have not already. And third, prepare a defense strategy that accounts for a broader array of potential litigants.

In terms of involvement in the regulatory process, there are at least two opportunities to weigh in on important actions that the EPA is considering. The agency's petroleum refinery RTR proposal, which contains the proposed fence-line monitoring program and standard discussed above, is open for public comment until Oct. 28.[23] Since this rule could set a precedent for other industries, companies beyond just petroleum refiners should study the proposal and consider weighing in on it. Any concerns not raised in the public comment process likely will be waived on judicial review. In addition, the EPA's proposal to require states to eliminate affirmative defenses for malfunctions in SIPs is open for comment until Nov. 6[24] and presents another matter on which companies should consider weighing in. The rationale behind this proposal is questionable on the grounds that the EPA is basing its decision on a federal court ruling that the agency does not have authority to create an affirmative defense by regulation, while at least two other federal courts have concluded that the agency does have authority to approve an affirmative defense as part of a SIP or FIP.

[17] *Id., citing City of Arlington v. FCC*, 133 S. Ct. 1863, 1871 n.3 (2013) (other citations omitted)

[18] 79 Fed. Reg. 55,920 (Sept. 17, 2014)

[19] 467 U.S. 837 (1984)

[20] *Luminant Generation Co. v. EPA*, 714 F.3d 841 (5th Cir. 2012); *Mont. Sulphur & Chem. Co. v. EPA*, 666 F3d 1174 (9th Cir. 2012); *Ariz. Public Service Co. v. EPA*, 562 F.3d 1116 (9th Cir. 2009)

[21] 64 Fed. Reg. 8,314 (Feb. 19, 1999)

[22] *Sierra Club v. TVA*, 430 F.3d 1337, 1352-54 (11th Cir. 2005)

[23] 79 Fed. Reg. 48,111 (Aug. 15, 2014)

[24] 79 Fed. Reg. 55,920 (Sept. 17, 2014)

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In addition to getting involved in the rulemaking process, companies also should consider increasing their efforts to reach out to and work with the communities where their facilities are located. This strategy, of course, is just a matter of common sense given that it is an integral part of being a good neighbor and a responsible corporate citizen. The EPA's emphasis on community awareness and involvement in air quality monitoring and the Clean Air Act enforcement process, however, significantly increases the importance of community outreach and communication. Numerous companies have implemented community outreach programs, often successfully, building positive relationships with the communities most likely to bring a CAA citizen suit. These programs frequently go beyond ensuring environmental excellence and transparency and include economic or social programs designed to enhance sustainability and promote social and economic progress. There are many reasons to build positive connections with communities, but the bottom line is there is no legal argument that is more effective than a robust plan for avoiding legal action altogether.

Finally, notwithstanding their best efforts at achieving compliance and working with local communities, companies will remain at risk of enforcement actions. Even the most diligently operated facilities face uncontrollable events that can result in compliance issues, especially at large, complex industrial, chemical and refinery operations. And, as noted, if the EPA and states close safe harbors for events such as equipment malfunctions, enforcement actions may well become inevitable. Companies, therefore, need to prepare by anticipating and planning for increased enforcement activity by a wider array of entities.

Perhaps the biggest issue companies should prepare for in this regard is the potential shift in enforcement of Clean Air Act regulations from the EPA to states, local agencies and—most significantly—private groups. Negotiating, resolving or defending a citizen suit case can require approaches and strategies that differ from those one might employ with the EPA or a state agency. Citizen groups, environmental groups and even individual litigants may be driven by a variety of different motives, ranging from eliminating air pollution to gaining political clout to generating attorney's fees. And unlike with the EPA, settlements with private litigants can incentivize copycat litigation by others. Companies, therefore, could be dealing with an increase in air pollution-related matters that more closely resemble private tort actions than traditional enforcement cases.

There are, of course, benefits to facing a citizen suit versus a federal enforcement action. For one, the company is not litigating against the government and its vast resources. Although private litigants can recoup fees and costs associated with their actions (which adds incentive), these groups do not necessarily have access to unlimited funds upfront—as the U.S. government does. In addition, unlike the EPA, private citizens will not receive deference in interpreting the law or regulations they seek to enforce.

On the other hand, the cons associated with facing more citizen suits include: there is vastly greater uncertainty—you don't know who is going to bring what type of case; settlement may be more challenging; and companies may have less ability to resolve multiple issues in one effort or proceeding as they would with government.

In planning for a new era of greater monitoring scrutiny and possibly increased enforcement actions from a wider variety of sources, companies may want to consider the following steps:

- *Build your expertise*. Cases ultimately are built with and dependent on evidence. Companies should be sure to have sufficient expertise in-house or on hand to analyze and assess the relevance and reliability of monitoring data and related information.

- *Review and if needed revise permit limits*. If limits previously have been established taking into account the availability of SSM exemptions and these periods now will be included in the overall compliance picture, the limits may have to be reconsidered. Work with your permitting authorities to review data from recent years, including those involving startup, shut-down and malfunction, and adjust limits accordingly.

- *Build your case*. Companies should consider whether to enhance their own monitoring capabilities and engage in more "defensive" monitoring by gathering additional reliable data. This strategy, of course, can be a double-edge sword and should be approached carefully, taking into account the unique factors individual facilities face.

- *Emphasize compliance*. The most assured method for avoiding enforcement actions is to eliminate compliance risks. In light of the increased scrutiny they are likely to face, companies should place a renewed emphasis on ensuring they have robust procedures and plans in place for ensuring all regulatory requirements are met and, where compliance issues arise, they are dealt with swiftly and thoroughly.

About the Author: Alec C. Zacaroli, counsel with Haynes & Boone LLP in Washington, D.C., has over 15 years of experience counseling clients on environmental matters and representing them in litigation and enforcement proceedings. His practice focuses primarily on federal and state air pollution control law. He can be reached at alec.zacaroli@haynesboone.com. Julie R. Domike and Jeff Civins, both partners with Haynes & Boone, contributed to this article.

This article does not represent the opinions of Bloomberg BNA, which welcomes other points of view.

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PRACTICES

Environmental

Environmental Litigation

Greenhouse Gases (GHG)

Power and Renewables

EDUCATION AND CLERKSHIPS

J.D., Georgetown University Law Center, 1986

A.B., Mount Holyoke College, 1976, *cum laude*

BAR ADMISSIONS

District of Columbia, 1987

Maryland, 1986

COURT ADMISSIONS

United States Supreme Court

U.S. Court of Appeals for the District of Columbia Circuit

U.S. District Court for the District of Columbia

LANGUAGES

Spanish

Julie Domike serves as the lawyer of choice for dozens of companies who count on her to successfully traverse the world of environmental law. These companies have come to value and respect Julie for her knowledge of the regulations, her understanding of complex manufacturing and production processes, and her dedication to helping them map the appropriate path forward to achieve their business goals, consistent with the laws.

Having previously served as a lawyer and manager at the Environmental Protection Agency (EPA) Headquarters, Julie understands the Agency's enforcement approach. Clients count on Julie's background and knowledge of the Agency's workings to engage with EPA in rulemaking, and enforcement; agency personnel benefit from her real-world experience. She has represented a variety of companies that have been the focus of EPA's regulations, including refineries, engine manufacturers, independent power producers, fuel producers, and farm equipment makers. Julie leverages her knowledge of the legal issues and approaches used by others in the industry to provide timely and workable solutions to thorny issues.

Julie has experience with rule development as well as challenges before the U.S. Court of Appeals for the District of Columbia. She has represented numerous companies across the country in complex negotiations with the U.S. Department of Justice and EPA, resulting in global settlements affecting multiple facilities. In addition to counseling on alleged violations, Julie has worked with companies engaged in developing new projects or modifying existing plants. She also has worked with clients on environmental audits and subsequent correction and disclosure to state and federal environmental agencies.

In addition to practicing law, Julie is an active member of the Environmental Law Institute and the Environment and Natural Resources Section of the American Bar Association, serving on the Air Quality and Administrative Law Committees and as an air quality subject matter expert for the section.

Julie is recognized as a top lawyer in the environmental bar, and has been included in *The Best Lawyers in America*© for Environmental Law and Litigation-Environmental (2006-2015), and has been selected for inclusion in *Super Lawyers* - Top 50 Women Lawyers and Top 100 Lawyers Wsahington, D.C. lists (2014). She is a co-editor of the *ABA Clean Air Act Handbook*, as well as co-author of the chapter on civil enforcement issues.

Professional Recognition

- Washington, D.C. Super Lawyers, Environmental, 2015
- Best Lawyers in America, Environmental Law and Litigation - Environmental, 2006-2015
- Top 50 Women Lawyers in Washington, D.C., 2014
- Top 100 Lawyers in Washington, D.C. 2014

Professional and Community Activities

- Air Quality subject matter expert for the American Bar Association Section on Energy, Environment, and Resources, for media inquiries
- Air Quality and Administrative Law Committees, Section on Environment and Natural Resources of the American Bar Association, Member (former Vice Chair)
- Environmental Law Institute, Member

News and Publications

05/06/2015 - D.C. Super Lawyers Recognizes Four Haynes and Boone Lawyers

11/4/2014 - Julie Domike in Law360: $100M Hyundai, Kia GHG Penalty Ups Stakes For Plant Rule

09/25/2014 - Recent Developments in Clean Air Act Enforcement Tactics May Spell Increased Risk for Many Companies

08/19/2014 - Haynes and Boone Repeats Recognition in Best Lawyers in America 2015, Woodward/White, Inc., August 2014

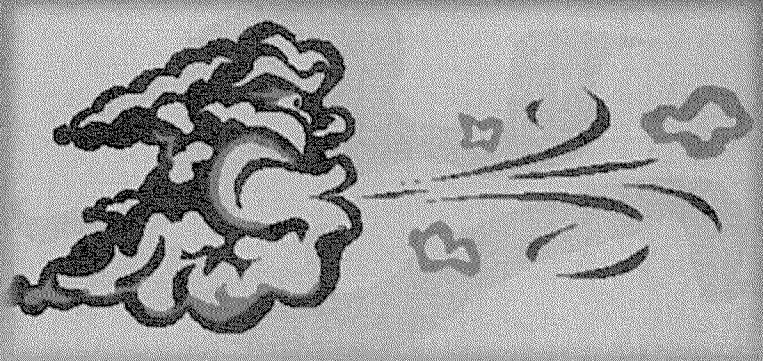
07/02/2014 - Haynes and Boone Expands Environmental Practice with Addition of Two Washington, D.C. Lawyers

27th Annual Texas Environmental Superconference
Air Quality Panel
"It's an Ill Wind that Blows No Good"

John Minter
TCEQ

Regional Haze and Greenhouse Gas Permitting Update

All opinions expressed are solely those of the author, and not necessarily the TCEQ.



"It's an Ill Wind That Blows No Good"

- Regional Haze Update – EPA's Proposed FIP for Texas: Additional emission reduction requirements for EGUs to address visibility impairment in Class I areas
- GHG Permitting in Texas after *UARG v. EPA*

Regional Haze Update

* Congress established a national goal of prevention of future and remedying of existing visibility impairment in the nation's National Parks and Wilderness Areas (known as Class I areas) resulting from man-made air pollution. Federal Clean Air Act (FCAA), §§169A and B.

* The CAA requires the EPA to adopt regulations to reduce visibility impairment in 156 federal Class I areas.

Regional Haze Update

Regional Haze rule: adopted in 1999

- 40 CFR §§ 51.308-309.
- Natural visibility conditions in Class I areas by 2064 is the default goal.
- Visibility – not an air quality standard or emissions limit.
- Visibility is measured in deciviews (dv), which is a unit of visibility impairment based on light extinction.
- Main Elements of State Plans:
  - Best Available Retrofit Technology (BART)
  - Reasonable Progress Goals (RPG)
  - Long-Term Strategy (LTS).

Regional Haze Update

Texas' Plan

- Two Class I areas in Texas: Big Bend and Guadalupe Mountains National Parks.
- February 25, 2009 - Adopted Regional Haze SIP revision; relied upon Clean Air Interstate Rule (CAIR) nitrogen oxides (NO_x) and sulfur dioxide (SO_2) emission reductions that EPA determined were "better than BART" from electric generating units.
- Estimated that Big Bend would meet natural conditions by 2155; Guadalupe Mountains by 2081.
- Slower rate of progress is due to international transport of emissions and dust storms.
- Not reasonable to implement additional controls due to high cost and imperceptible visibility benefit.

Regional Haze Update

* January 15, 2009 – EPA issues finding of failure to submit to Texas and 36 other states, which started a 2 year FIP clock.

* EPA was sued for failure to issue FIPs by the January 15, 2011 deadline.

* Texas specific deadlines for EPA action:
  * Original consent decree – EPA proposal of either approval or disapproval with an immediate FIP by May 15, 2012 and a final determination by November 15, 2012; and
  * Latest amended consent decree - EPA proposed by November 26, 2014 and final action will occur by December 9, 2015.

Regional Haze Update

* EPA's Proposed Action:
  * Partial approval and partial disapproval and FIP.
  * Also partially disapproves Oklahoma's reasonable progress goals for Wichita Mountains.
  * Disapproves the RPG Analysis.
  * Disapproves Texas' LTS consultation with Oklahoma.
* FIP:
  * EPA's FIP proposes SO2 limits on 15 EGUs at 8 power plants in Texas.
  * Scrubber upgrades and retrofits.
  * Visibility benefits at Class I areas in Texas and Oklahoma less than half a deciview.

Regional Haze Update

What Happens Next? Possible Legal Challenge

* Final EPA action on the Texas SIP and FIP due December 9, 2015.

* Courts have Given EPA deference in disapproving Regional Haze SIPs.
  * *Oklahoma v. EPA*, 723 F.3d 1201, 10th Cir. (2013)
  * *WildEarth Guardians v. EPA*, 759 F.3d 1064, 9th Cir. (2014)
  * *St. Marys Cement Inc. v. EPA*, 782 F.3d 280, 6th Cir. (2015)
  * Even when disapproving Reasonable Progress Goals:
    * *North Dakota v. EPA*, 730 F.3d 750, 8th Cir., (2013).

* Arizona challenge may be precedential.
  * *Arizona v. EPA*, No. 14-73368, 9th Cir.
  * Dissent in *Oklahoma* case.

* Impact of a final FIP and litigation on next planning phase.

Greenhouse Gas Permitting in Texas – an Update after UARG v. EPA

* EPA approved TCEQ rules for PSD permitting into Texas SIP November 10, 2014.
* EPA Rescinded the GHG PSD FIP.
* EPA has issued 63 PSD permits to Texas sources.
* TCEQ is issuing permits for "anyway" sources:
  * Two permits issued
  * 31 applications in review or to public notice
  * EPA has commented on several applications.

Greenhouse Gas Permitting in Texas – an Update after UARG v. EPA

* *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (June, 23, 2014)
  * D.C. Circuit – Amended Judgment and Order, April 10, 2015
    * Motion for Rehearing filed.

* SIP Call/FIP Cases, *Texas v. EPA*, 726 F.3d 180, D.C. Cir (2013)
  * Motions for Rehearing filed after *UARG* decision
    * May 4, 2015, D.C. Circuit denied all petitions for rehearing
    * No further appeals have been filed.

Greenhouse Gas Permitting in Texas – an Update after UARG v. EPA

EPA's Actions since UARG

- Direct Final Rule to rescind Step 2 or "Non-anyway" source PSD permits; effective July 6, 2015.
- Announced intent to propose *de minimis* level:
  - By June 2016
  - Possibly lower than 75,000 tpy of CO_2e
  - Any deviation from current threshold will require TCEQ to conduct rulemaking.

John Minter is a staff attorney in the Air Section of the Texas Commission on Environmental Quality. He began working for the agency in 2002 and has worked on many air quality programs over the years. Current responsibilities include lead attorney for the Houston-Galveston-Brazoria ozone nonattainment area State Implementation Plan (SIP), Regional Haze SIP development, sulfur dioxide (SO_2) NAAQS designations and implementation, transportation fuels program support; and legal support for the Air Permits Division's greenhouse gas and Title V permitting programs. Previous to TCEQ, he worked in the Worldwide Environmental Affairs Group at Dell, Inc. and served as Legislative Assistant and Natural Resources Committee aide to Congressman Peter Hoagland (Nebraska). John earned his Juris Doctor from Creighton University School of Law and a Bachelor of Arts in Government from the University of Texas at Austin. Outside of work he volunteers with his two sons' Boy Scout troop and soccer and swimming teams.

Recent Developments on Startup, Shutdown, Malfunction and Maintenance Emissions

Ilan Levin, Environmental Integrity Project

27th Annual Texas Environmental Superconference

August 6-7, 2015

I. Introduction

On May 22, 2015, EPA finalized a rule requiring 36 states, including Texas, to revise their State Implementation Plans to address excess emissions resulting from startup, shutdown or malfunction ("SSM"), or "upsets."[1] Specifically, EPA called on the states to remove either upset exemptions or affirmative defenses that allow sources to escape liability for emissions that exceed authorized limits. More than a decade ago, Texas removed upset exemptions from its rules, and replaced the exemptions with the availability of an affirmative defense to penalties. So, for Texas, this recent "SSM SIP Call" will require only the removal of the affirmative defense to civil penalties for violations resulting from an upset found at 30 TEX. ADMIN. CODE § 101.222.

The rule changes that EPA is asking Texas to make under the SSM SIP Call are simple. Elimination of the affirmative defense from the Texas SIP will simplify enforcement rules, but the practical effect on Texas industry will be nil. Texas industries will not face any new risk of enforcement for upset emissions. Nonetheless, Texas and several industries have filed a challenge, in the Fifth Circuit, to the "Texas portion" of the SSM SIP Call.

The harder work, which is not included in EPA's SSM SIP Call, involves authorizing routine or reasonably foreseeable maintenance, startup, and shutdown emissions. Texas has already embarked down this path and authorized "Planned Maintenance, Startup, and Shutdown" emissions for major sources including refineries and power plants. Texas "Planned MSS" authorizations will come under scrutiny as EPA and other states begin to consider ways to authorize and account for routine (i.e., non-upset) startup and shutdown emissions.

II. Background

EPA's longstanding policy has been that emissions above authorized limits are violations. (Memorandum from Kathleen Bennett, Asst. Administrator for Air, Noise and Radiation, *Policy on Excess Emissions During Startup, Shutdown, and Maintenance, and Malfunctions* (Sept. 28, 1982) ("1982 SSM Guidance") and Memorandum from Kathleen Bennett, Asst. Administrator for Air, Noise and Radiation, *Policy on Excess Emissions During Startup, Shutdown,*

[1] State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction; 80 Fed. Reg. 33,839 (June 12, 2015).

Maintenance and Malfunctions (Feb. 15, 1983) ("1983 SSM Guidance)). These policies emphasized that emissions exceeding limits during startups and shutdowns, whether a result of malfunctions or maintenance, could degrade air quality or interfere with maintenance of the NAAQS and could not, therefore, be exempt from compliance. (1982 SSM Guidance, at 1). EPA's longstanding policy has been that state regulators have enforcement discretion to consider "sudden and unavoidable malfunctions caused by circumstances entirely beyond the control of the owner and/or operator." *Id.* at Attachment p. 1.

In 1999 EPA revised its SSM policy. Memorandum from Steven Herman, EPA Asst. Administrator for Enforcement and Compliance Assurance, *State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown* (Sept. 20, 1999) ("1999 MSS Guidance"). The revisions acknowledged that many states had SIP provisions that were inconsistent with EPA guidance, either because they were approved prior to the 1982 Memorandum or because they were "inadvertently approved" after the guidance. *Id.* at 1. EPA reiterated its position that all excess emissions are violations of the Act. *Id.* It then laid out three options for dealing with illegal, excess emissions during MSS. First, States could use their discretion to not take enforcement action. Second, States could specifically address these events in narrowly tailored, substantive SIP provisions that take into account the effect of such emissions on air quality. Third, for the first time, EPA provided that States could adopt an affirmative defense to penalties for such emissions.

In June 2011, Sierra Club petitioned EPA to issue a SIP Call requiring states to remove impermissible upset exemptions and affirmative defenses from their rules.[2] In response, in February 2013, EPA proposed to partially grant the Petition and to propose SIP Calls for several states in order to remove upset exemptions. But, in keeping with the Agency's policy at the time, EPA did not act to remove affirmative defenses from state plans.[3]

At the state level, historically, Texas's rules included various versions of an exemption or a defense for such emissions since the 1970s. Some of these rules were approved by EPA into the Texas SIP and others were not. In 2002, EPA issued a Notice of Deficiency to Texas, finding that the SSM defense provisions violate the Clean Air Act. 67 Fed.Reg. 732 (Jan. 7, 2002). In response, Texas revised its rules and submitted them to EPA for approval. In November 2010, EPA approved into the Texas SIP the rules providing for an affirmative defense to penalties for unauthorized emissions resulting from upsets or unscheduled maintenance, startup or shutdown. 75 Fed.Reg. 68,989 (Nov. 10, 2010). The rules state that excess emissions "are subject to an affirmative defense to all claims in enforcement actions brought for these events, other than claims for administrative technical orders and actions for injunctive relief, for which the owner or operator proves" certain listed criteria. 30 TAC §§ 101.222(b), (c), (d), and (e). The listed criteria are similar, though not identical, to those in EPA's guidance. While EPA approved the affirmative defense for illegal emissions resulting from upsets and unscheduled maintenance, startup and shutdown, it disapproved the defense for illegal emissions resulting from scheduled maintenance, startup and shutdown. Environmental groups challenged EPA's approval of the Texas affirmative defense. But, the Fifth Circuit upheld EPA's approval of

[2] http://www.epa.gov/airquality/urbanair/sipstatus/docs/ssm_sierra_petition_021213.pdf
[3] 78 Fed. Reg. 12460 (February 22, 2013)

Texas's affirmative defense. *Luminant Generation Co. LLC v. EPA*, 714 F.3d 841 (5th Cir. 2013).

On April 18, 2014, the U.S. Court of Appeals for the D.C. Circuit issued its decision in *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014). In that case, the court evaluated the legal validity of an affirmative defense provision created by the EPA in conjunction with specific standards applicable to the manufacturers of Portland cement. In the court's opinion, affirmative defense provisions cannot be applicable to violations of Clean Air Act requirements. The Court reasoned that, because Section 113(e)(1) of the Act directs courts to "take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence ..., payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation," Id at 1063.

On September 17, 2014, in light of the DC Circuit opinion, EPA published a Supplemental Proposed Rule, reflecting a shift in the Agency's policy on affirmative defenses and proposing to include Texas in the SIP Call, in order to remove the affirmative defense provisions from the Texas SIP. 79 Fed. Reg. 55920 (September 17, 2014).

EPA published the final SIP Call rule in June 2015. "State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction," published at 80 Fed. Reg. 33,840 (June 12, 2015).

III. Regulatory Exemptions and Affirmative Defenses Complicate Clean Air Act Enforcement

As intended by the Clean Air Act, the threat of enforcement action, including penalties, for violations of emission limits serves as an incentive for industries to invest in the maintenance, management, and technologies needed to reduce emissions during startup, shutdown and maintenance and to prevent upsets — and thereby protect public health.[4]

A. Emissions During Startups, Shutdowns, and Malfunctions Can Be Massive and Pose a Threat to Air Quality

Between 2009 and 2013, Texas industrial sources reported nearly 130,000 tons of sulfur dioxide (SO_2) and smog-forming volatile organic compounds (VOC) and nitrogen oxides (NO_x) during "emission events," or upsets.[5] The actual VOC and NO_x tallies for flares during these

[4] For example, Consent Decrees with Shell Oil Company for emissions at its Deer Park facility and with Chevron Phillips Chemical Co. LP for emissions at its Cedar Bayou facility resulted in requirements for 80-85% reductions in emissions due to upsets.

[5] *See e.g.*, Environmental Integrity Project, *Accident Prone: Malfunctions and "Abnormal" Emission Events at Refineries, Chemical Plants, and Natural Gas Facilities in Texas*, 2009-2011 (2012), available

events are significantly higher than what is reported based on EPA's recent finding that current VOC and NO_x "AP-42" emission factors grossly underestimate releases by a factor of 4 and 42 respectively.

Shell's Deer Park refinery and petrochemical complex in the Houston Ship Channel reported more than 46 tons of hazardous air pollutant emissions in 2013 – almost all of it from a single event that lasted for 15 days, thus illustrating the exposure risk to fenceline communities from upsets.[6] (In its report for this event, Shell claims the affirmative defense applies. *Id.*) Emission releases like this can be avoided and minimized with the proper monitoring of valves, as EPA recently proposed for refineries in the revised National Emission Standards for Hazardous Air Pollutants (NESHAP), or by requiring facilities to route these emissions to a flare or other vapor control device, as the Bay Area Air Quality Management District requires. *See* Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards; Proposed Rule, 79 Fed. Reg. 36879, 36970; BAAQMD Rule 8-28-304.

Flares are a common sight for people living near refineries, petrochemical plants, and oil and gas facilities. Not surprisingly, a significant portion of the reported upset emissions in Texas were routed to a flare before being released to the atmosphere. *See* TCEQ Emission Event Database for 2009-2013. Based on EPA's recent review of flare VOC and NOx emission factors, these reported emissions are significantly underestimated: actual VOC emissions are about 4 times higher, and NO_x emissions are more than 42 times higher, than what companies report based on outdated and erroneous emission factors.[7] Therefore, air pollution from flares – a very common source of SSM emissions – is likely to be much greater than previously estimated.

EPA's SIP Call to eliminate affirmative defenses will help deter these types of massive and often avoidable emissions by driving industries to correct problems to avoid possible enforcement.

B. The Clean Air Act Does Not Allow for Affirmative Defenses

The Clean Air Act specifically lists the types of violations subject to its various enforcement provisions. For federal civil judicial enforcement actions, the list includes violations of "any requirement or prohibition of an applicable implementation plan or permit." 42 U.S.C. § 7413(b). Similarly, for citizen suits, the list includes violations of a Prevention of Significant Deterioration or New Source Review permit or of "any standard, limitation, or

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at http://www.environmentalintegrity.org/news_reports/documents/20120718AccidentProneFinal.pdf; Ltr. from E. Schaeffer, Executive Director, Environmental Integrity Project, to A. Elkins, Inspector General, U.S. EPA, Re: Emission Events in Texas and Enforcement of the Clean Air Act (May 15, 2014); Ltr. from Schaeffer to Elkins, Re: Clean Air Act Enforcement of Excess Emissions and the Affirmative Defense (April 23, 2013) (with letter of amendment dated July 10, 2013).

[6] TCEQ Emission Event Database for 2009-13, at Incident 178612 on January 27, 2013. According to Shell's report, a valve was left in the open position.

[7] EPA, DRAFT Review of Test Reports for Emissions Factors Development for Flares and Certain Refinery Operations, 44-45 (Aug. 2014).

schedule established under ... any applicable state implementation plan." 42 U.S.C. § 7604(a)(1) & (f). SIP or related permit violations are, therefore, clearly subject to the federal civil and citizen suit enforcement provisions of the Act. *See Train v. Natural Resources Defense Council, Inc.*, 421 U.S. 6092 at n. 27 (1975); *Trustees for Alaska v. Fink,* 17 F.3d 1209, 1210 n.3 (9th Cir. 1994) ("Having 'the force and effect of federal law,' the EPA-approved and promulgated Alaska SIP is enforceable in federal courts"), quoting *Union Electric Co. v. EPA*, 515 F.2d 206, 211 n.17 (8th Cir. 1975), aff'd, 427 U.S. 246 (1976)); *Her Majesty the Queen in Right of the Province of Ontario v. City of Detroit*, 874 F.2d 332, 335 (6th Cir. 1989) ("If a state implementation plan ... is approved by the EPA, its requirements become federal law and are fully enforceable in federal court.").

The Act is also clear that in civil judicial enforcement actions and citizen suits, the district court "shall have jurisdiction" to award penalties. 42 U.S.C. § 7413(b) (district court "shall have jurisdiction ... to assess such civil penalty..."); 42 U.S.C. § 7604(a) (district court "shall have jurisdiction ... to apply any appropriate civil penalties ..."). The only exception to the courts' authority to award penalties in civil judicial enforcement actions is for noncompliance with administrative subpoenas or with certain monitoring and inspection requirements, "where the violator had sufficient cause to violate or fail or refuse to comply with such subpoena or action." 42 U.S.C. § 7413(e)(1). The only exception to the courts' authority to award penalties in citizen suits is for actions against the EPA Administrator for the failure to perform a nondiscretionary duty. 42 U.S.C. § 7604(a).

Section 113(e) of the Act, which is expressly applicable to civil judicial enforcement actions and citizen suits, lists the criteria the district court must consider in assessing penalties and explicitly states that "[a] penalty may be assessed for each day of violation." 42 U.S.C. § 7413(e)(1) & (2). The plain language of the Act grants district courts authority to award penalties for each day of violation for every violation subject to the Act's federal civil judicial and citizen suit enforcement provisions, with only the limited exceptions identified above.

Because assessing penalties is expressly reserved to the federal district courts, neither EPA nor the states have the authority to adopt rules limiting the district courts' penalty assessment authority. *American Petroleum Institute v. U.S. EPA*, 52 F.3d 1113, 1119 (D.C. Cir. 1995) ("EPA cannot rely on its general authority to make rules necessary to carry out its functions when a specific statutory directive defines the relevant functions of EPA in a particular area," citing *Sierra Club v. EPA,* 719 F.2d 436, 455 (D.C. Cir. 1983), *cert. denied,* 468 U.S. 1204 (1984)); *Adams Fruit Co., Inc. v. Barrett*, 494 U.S. 638, 645 (1990); *Texas v. United States*, 497 F.3d 491, 501–503 (5th Cir. 2007); *Kelley v. EPA*, 15 F.3d 1100 (D.C. Cir. 1994).

The D.C. Circuit agreed with this reasoning, holding that an affirmative defense for private civil suits exceeds EPA's statutory authority because, under Sections 113(e)(1) and 304(a) of the Clean Air Act, the decision whether to award penalties is for a court, and not the regulators, to decide. *See Natural Resources Defense Council v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014).

C. Affirmative Defenses Frustrate Enforcement

Affirmative defenses in SIPs frustrate enforcement of the Act and create extra-statutory hurdles for citizen suits. In practice, affirmative defenses can operate as *de facto* exemptions and a bar against citizen enforcement.

In theory, EPA approved a narrow affirmative defense into the Texas SIP. In upholding that EPA action, the Fifth Circuit cited with approval EPA's determination that the Texas affirmative defense provisions did not "preclude citizen suits under the Act," but rather merely provided an "affirmative defense [that] may be raised in defense of a claim brought by EPA, the State or a private citizen" and that . . . "even where an affirmative defense is successfully raised in defense to an action for penalties, it does not preclude other judicial relief that may be available, such as injunctive relief or a requirement to mitigate past harm or to correct the non-compliance at issue." *Luminant Generation Co. LLC v. EPA*, 714 F.3d 841, 855 (5th Cir. 2013); *see also id.* at 853 ("Regardless, even if all nine required criteria are met and the violator establishes the applicability of the approved affirmative defense, injunctive relief is still available") (citing 75 Fed.Reg. at 68,991 n.4).

While the law appeared clear to EPA and the Fifth Circuit when they assured the public that the Texas affirmative defense would not thwart citizen enforcement and that the affirmative defense only applies to penalties and not to injunctive relief, that is not how things played out in practice. In Texas, as long as sources report their excess emissions, the TCEQ's "Investigation Reports" typically just tick off all of the affirmative defense criteria, and then often conclude that there were "no violations." In so doing, the State has effectively treated the affirmative defense as a blanket (no violation) exemption.

Luminant (formerly TXU) defended the EPA's approval of the Texas affirmative defense as a narrow defense to penalties. *See*, Principal Brief of Petitioners Luminant Generation Co. et al. at 31, *Luminant Generation Co. v. U.S. EPA*, No. 10-60934, 2011 WL 2000032 at *31 ("As TCEQ explained, the affirmative defenses only applied to monetary fines and did not prevent enforcement to assure compliance with emission limits"). Yet, when faced with a citizen suit, the company took a broader view of the affirmative defense and argued that the affirmative defense bars all claims for relief:

> [T]he summary judgment evidence presented by Defendants demonstrates that the opacity events that were self-reported by Luminant to the State of Texas were not violations of the federally-approved Texas SIP or Big Brown's Title V permit. Two provisions of the Texas SIP—30 Texas Administrative Code § 101.222(d) & (e), both of which *were approved* by the U.S. Environmental Protection Agency ("EPA")—preclude the entry of summary judgment. After its own factual investigation, the Texas Commission on Environmental Quality ("TCEQ") determined that all of the 6,520 opacity events at issue here satisfy the demonstration criteria in § 101.222(d) & (e) (which provide for affirmative defenses for "upsets" and "unplanned maintenance, startup, and shutdown") and thus were not violations of the 30%

> opacity limit in 30 Texas Administrative Code § 111.111(a)(1)(A), as Sierra Club contends.

Defs.' Resp. in Opposition to Pl.'s Mot. for Summary Judgment, at 1-2; *see also id.* 9-15. Persuaded by Luminant's argument, the district court denied the Sierra Club's motion for summary judgment on *liability*. Then, following a trial on the merits, the court deferred again to the state's findings that meeting the affirmative defense factors equates to "no violations" of the Act:

> It does seem to the Court that what the plaintiff seeks is for this Court to overrule the extensive and complete findings of the Texas Commission on Environmental Quality which is designed to and does regulate facilities such as Big Brown the defendant in this case. I don't think that's normally an appropriate function of federal courts and certainly – it's certainly something I decline to do and it's something that should only be done in extraordinary circumstances. It would be the finding of the Court that plaintiff has not proved by a preponderance of the evidence that the defendant has violated the Clean Air Act.

Vol. 3 of Trial Transcript, at 574, *Sierra Club v. Energy Future Holdings Corp. et al.*, Civil Action No. W-12-cv-108 (W.D. Tex. 2014). In its final written order on the merits, the court continued to heavily rely on the TCEQ's purported findings on the affirmative defense and liability. The court also held that penalties were not appropriate, again relying heavily on TCEQ's findings on the affirmative defense. 2014 WL 2153913, at *12-13.

The Western District of Texas's erroneous rulings are based in large part on deference to the state's findings regarding the affirmative defense. This demonstrates firsthand how affirmative defenses in SIPs serve only to thwart citizen enforcement of the Clean Air Act.

Thus, the Texas track record shows that affirmative defenses, despite EPA's best intentions, can effectively block enforcement of the Act.

IV. The Harder Work Comes With Authorizing New or Alternate Emission Limits for Routine or Foreseeable Emissions

By definition, true upsets are unavoidable and cannot, therefore, be permitted. As explained above, the elimination of the affirmative defense simplifies enforcement for upset emissions: Regulators have enforcement discretion, and district court judges have penalty discretion in citizen suits.

The SSM SIP Call will close loopholes and simplify enforcement for upsets. The harder work will involve the treatment of emissions from predictable, routine, or foreseeable startups,

shutdowns and/or maintenance. EPA has a longstanding policy that these emissions need to be accounted for, with all of the attendant Clean Air Act permitting requirements.[8]

> "[W]e note that the State cannot issue any NSR SIP permit that has a less stringent emission limit than already is contained in the approved SIP. For example, the State cannot issue a NSR SIP permit that has less stringent Volatile Organic Compounds limits than those in Chapter 115 as approved into the Texas SIP, or less stringent Oxides of Nitrogen (NOx) limits in Chapter 117 as approved into the Texas SIP. The State must issue a NSR SIP permit that meets all applicable requirements of the Texas SIP. If the State wishes to issue a NSR SIP permit that does not meet the applicable requirements of the Texas SIP, then any such alternative limits would need to be submitted to EPA for approval as a source-specific revision to the SIP, before they would modify the federally applicable emission limits in the approved SIP."

Approval and Promulgation of Implementation Plans; Texas; Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities, EPA, 75 Fed. Reg. 68,989 at 68,995 (Nov. 10, 2010)(emphasis added).

EPA has indicated that, if a source cannot comply with emissions limitations because of technological limitations, then "it may be appropriate for the state to provide special emission limitations or control measures that apply to the source during startup and shutdown." 78 Fed. Reg. at 12480. Sources, however, have the burden to demonstrate that they cannot meet existing limits, and EPA should not allow increased limits when sources cannot meet existing limits due to antiquated — or inadequately designed, maintained, or operated — pollution control equipment. For sources that truly demonstrate that certain foreseeable emissions simply cannot meet current limits, then any attempts to authorize higher emission limits need to be done in compliance with SIPs and with fundamental permitting requirements under the Clean Air Act. While states may change SIP limits, these changes must be submitted for EPA approval through the SIP process, which would include demonstrating that higher limits would not lead to violations of the NAAQS or PSD increments.

If EPA chooses to allow new, higher, or alternate limits during foreseeable periods (such as startup and shutdown) due to proven technological limitations, then EPA should set clear parameters for states to address emissions during these periods. At a minimum, EPA should require the following for any emissions that are to be newly permitted but have not previously been authorized or considered as part of a source's potential to emit: alternate limits should represent Best Available Control Technology and/or the Lowest Achievable Emission Rate; there should be clear, enforceable rules that define when the alternative limits apply; there should

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[8] *See, e.g.,* January 28, 1993 Memo from John B. Rasnic, Automatic or Blanket Exemptions for Excess Emissions during Startup and Shutdowns under PSD ("Startup and shutdown as part of the normal operation of a source should be accounted for in the planning, design and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during this time. As the 1982 memoranda states, without clear definition and limitations, these automatic exemptions or even secondary limits could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment.").

be a demonstration that new limits will not impermissibly degrade air quality, including a demonstration that newly authorized worst-case emissions will not cause or contribute to violations of the NAAQS or PSD increments; and proposed limits should be subject to public notice, comment, and judicial review. Further, these emissions must be authorized together in the same permit with the source's other routine emissions from the same unit.

EPA itself has previously indicated that these are the basic requirements for authorizing startup and shutdown emissions. For example, in a May 21, 2008 letter to Texas, EPA stated:

> Reconciliation to correct terms and conditions in Prevention of Significant Deterioration/Nonattainment New Source Review permits, including adding or revising requirements for MSS activities, should undergo the same process as the original Federal Permit. This process would include a Best Available Control Technology (BACT) and/or Lowest Achievable Control Technology (LAER) review, an air quality impact analyses [sic], and public participation requirements for all sources.

Letter from Jeff Robinson, Air Permits Section, U.S. EPA Region VI, to Richard Hyde, P.E., Air Permits Division, TCEQ, regarding Permitting of MSS Emissions at Major Stationary Sources, May 21, 2008. Available at: http://www.epa.gov/region07/air/nsr/nsrmemos/tceqssm.pdf. EPA elaborated:

> A unit cannot obtain an MSS permit allowing emissions but be 'grandfathered' from new source program requirements in other respects (e.g., no Federal BACT or LAER, etc. . .). Furthermore, EPA regards the inclusion of MSS emissions related to any SIP approved [NNSR] or [PSD] permit program as a reopening of the original NSR permit to correct the potential to emit (PTE) assumption. TCEQ should reopen and correct the PTE and other terms and conditions in existing permits that will conflict with this permit.

Id. at p. 1 of enclosure. Regarding public participation, EPA elaborated that "EPA guidance and policy requires 30-day notice and comment on a draft permit when a PSD PSD [sic] or NNSR permit is re-opened." *Id.* at p. 2 of enclosure. And regarding air quality analyses, EPA elaborated that TCEQ should "ensure that these permits do not interfere with attainment and maintenance of the NAAQS or PSD increments." *Id.* at p. 3 of enclosure.

A source's potential to emit includes quantifiable emissions associated with startups and shutdowns, and these emissions must be included in NSR and PSD applicability determinations and air quality permit reviews. "Potential to emit" is the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Thus, emissions during predictable, routine, or foreseeable events (even if the event, e.g., a startup or a shutdown, occurs only once a month or once a year, etc.), are subject to the normal Clean Air Act permitting requirements. For example, the permitting authority must make an on-the-record determination as to whether compliance with existing permit limitations is infeasible, despite best efforts,

during startup and/or shutdown, and if so, what design or control, or other changes are appropriate for inclusion in the permit to minimize the excess emissions during those periods. In addition, the permitting authority must determine that these emissions comply with applicable requirements, including NAAQS and PSD increment provisions. The permitting authority's determination of the startup and/or shutdown terms and conditions must also be subject to public notice and comment consistent with the requirements of 40 CFR 51.161. An alternate limit may only be allowed if it is subject to these Clean Air Act requirements and justified as BACT or LAER.[9]

And yet, EPA has let Texas authorize huge increases in emissions, often for up to hundreds of hours per year, for so-called "planned" maintenance, startups, and shutdowns, and has done so without requiring adequate BACT/LAER reviews, adequate impacts analyses, or public notice. Moreover, EPA has allowed Texas to issue "Planned Maintenance, Startup, and Shutdown" permits that weaken or completely void SIP limits, without requiring these changes to follow the state's approved SIP.

On May 26, 2015, several Texas environmental groups petitioned EPA to issue a SIP Call to ensure that "planned" startup, shutdown and maintenance emissions are authorized in accordance with federal Clean Air Act requirements, and to review permits for 35 electric generating units issued between November 30, 2011 and April 1, 2013. The Petition alleges that the permits have been unlawfully revised such that, during so-called "planned" maintenance, startup, and shutdown, covered units have been effectively exempted from complying with New Source Review and/or SIP limits.

V. Conclusion

EPA's SSM SIP Call is a national rule that affects more than half the states and requires them to eliminate impermissible blanket exemptions from compliance with limits during upsets. In addition, EPA's SSM SIP Call is national in scope in that it establishes a new EPA policy regarding affirmative defenses. EPA is well within its authority, and on solid legal and technical footing, to require states to eliminate affirmative defenses from their rules, notwithstanding that the Agency had previously approved such provisions.

Perhaps more interesting than the elimination of the affirmative defense provisions from Texas's rules, is the future of the State's permitting program for emissions from "planned" startups, shutdowns, and maintenance. The SSM SIP Call will force other states to figure out how to authorize routine or foreseeable startup and shutdown emissions, and this will put a spotlight on the Texas program.

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[9] *See In re: Tallmadge Generating Station,* PSD Appeal No. 02-12, (EAB, May 22, *2003), In re: Rockgen Energy Center,* PSD Appeal No. 99-1, (EAB August 25, 1999).

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Erin received a Bachelor of Architecture from the University of Houston in 1996 and a Juris Doctor from St. Mary's University School of Law in 2004. Prior to joining the Air Permits Division, she worked for the Attorney General of Texas and for the TCEQ Office of Legal Services (OLS) as a staff attorney for seven years. For OLS, Erin practiced water rights, water utilities, and air law. She has worked on a wide array of rulemaking and air permitting cases, from rock crushers to several power plant contested hearings. In December 2011, she joined the Air Permits Division where she leads the division's oil and gas rulemaking and regulatory analysis and in 2014 she took over as the Air Pollutant Watch List Coordinator for the TCEQ.

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Colorado's Regulation No. 7: A Look at the Future Regulation of Methane Emissions in the Oil and Gas Sector

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Introduction

In February of 2014, Colorado's Air Quality Control Commission (the "AQCC") approved the first state regulations explicitly addressing methane emissions and associated climate change concerns.[1] This final rule, which was developed with some industry support, imposed stringent methane/ethane and volatile organic compounds ("VOC") control requirements on oil and gas production and compressor station operations, including a "no venting" standard for most storage tanks and comprehensive periodic monitoring requirements.[2]

The new hydrocarbon emissions limits took the form of amendments to existing Regulation No. 7, Colorado's ozone control standards. The new Regulation No. 7 is being examined by other governmental agencies as they develop their own greenhouse gas ("GHG") rules for the oil and gas sector. Accordingly, the rule may provide insight into the possible scope of future federal and state climate change regulations, including amendments to Subpart OOOO of the U.S. Environmental Protection Agency's ("U.S. EPA") New Source Performance Standards ("NSPS").

This paper discusses the particular circumstances that factored into the creation of the new Regulation No. 7 and why the rules were supported by several significant oil and gas operators. As will be discussed, climate change was not the major driving consideration behind the rules. Instead, the prime consideration appears to have been a perceived need to assuage citizen concerns regarding the overall impacts of oil and gas development and, thereby, to prevent a constitutional amendment allowing municipalities to stringently regulate or outright ban hydraulic fracturing.

However, that methane was not the primary focus of the rules has become immaterial, given the attention being paid to the rule by other agencies. Therefore, this paper also summarizes the specific provisions of the new Regulation No. 7, including a "no venting" mandate for storage tanks, requirements for Storage Tank Emissions Management ("STEM") plans and Approved Instrument Monitoring Method ("AIMM"), and best management practices ("BMPs") for well maintenance and liquids unloading.

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[1] The AQCC claims authority to regulate methane and ethane emissions based on the following language in the Colorado Air Pollution Prevention and Control Act: "Such emission control regulations may include, but shall not be limited to, regulations pertaining to . . . hydrocarbons . . . ." COLO. REV. STAT. § 25-7-109(2)(c).

[2] The AQCC also made changes to Regulation No. 3 and fully-incorporated NSPS Subpart OOOO into Regulation No. 6. However, this paper focuses on Regulation No. 7.

Hydraulic Fracturing Concerns Fueled the Regulation No. 7 Amendments

Local Fracking Bans/Moratoria Established and Challenged

In mid-July 2012, the City Council of Longmont, Colorado passed an ordinance (O-2012-25) restricting oil and gas well development within city limits. This ordinance included a general ban on new wells in areas zoned as residential but, due to preemption and takings concerns, provided an exemption if mineral interests cannot be accessed by a well drilled from a non-residential area. The Colorado Oil and Gas Conservation Commission ("COGCC") sued thirteen days later.

The City's new ordinance was not enough to assuage the concerns of Longmont's citizens. In November 2012, the voters passed an initiative amending the City Charter to fully ban all hydraulic fracturing within city limits. The Colorado Oil and Gas Association ("COGA") sued, but the ban was not immediately challenged by the state. Although Colorado had promptly challenged the ordinance passed by the City Council, the state was less willing to start a direct conflict with the voters. However, given that the central legal issue was preemption, the COGCC was eventually joined as a necessary party to the lawsuit.

In 2013, four other jurisdictions passed bans or extended moratoria: Boulder, Broomfield, Fort Collins, and Lafayette. The City of Lafayette, for example, passed restrictions which, among other things, declared the storage or transport of fracking wastewater to be illegal within city limits and proclaimed (without citing a legal basis) that the ban could not be preempted by federal or state law.

In general, it appears that the primary citizen concerns driving the passage of the fracking bans and moratoria concerned direct health and environmental impacts and nuisance concerns, and not long-term climate change concerns. These concerns included water use, groundwater contamination, air emissions, proximity to residences, bright lights from 24-7 drilling operations, noise, and truck traffic. However, the environmental advocacy groups campaigning against oil and gas production in Colorado have strong climate change concerns which are regularly expressed in their litany of alleged threats posed by oil and gas.

Case Law Suggested that the Bans Would be Overturned

There was general agreement among legal observers that the courts would most likely overturn the local bans and moratoria based on opinions issued by the Colorado Supreme Court in 1992. Accordingly, the concern with the local fracking bans had more to do with a perception that Coloradans were increasingly opposed to hydraulic fracturing and the possibility that this trend would result in a statewide anti-fracking voter initiative.

The two most significant Colorado Supreme Court opinions on local control over oil and gas were *County Commissioners of La Plate County v. Bowen/Edwards Association Inc.*, 830 P.2d 1045 (Colo. 1992) and *Voss v. Lundvall Brothers., Inc.*, 830 P.2d 1061 (Colo. 1992). In *LaPlatte County*, the court held that the state Oil and Gas Conservation Act does not preempt all aspects of a county's land use authority. However, the court also stated that there may be instances where the state and local regulatory schemes conflict and, where such conflicts exist, the county regulations must yield to the state interest.

Voss concerned a Greeley, Colorado land use ordinance that completely banned drilling within city limits. The court held that the Greeley ban was preempted by state law because it substantially impedes the interest of the state in fostering the efficient development and production of oil and gas resources in a manner that prevents waste and furthers correlative rights.

The Regulation No. 7 Amendments Mushroomed Into a Major Rule

In 2013, the AQCC initiated a rulemaking to fully adopt into its existing Regulation 6 the U.S. EPA's Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution, NSPS Subpart OOOO. The AQCC also planned minor changes to its permitting provisions in Regulation 3 and the oil and gas control measures in Regulation No. 7. The initial outreach sessions on the rulemaking indicated that the AQCC wanted to streamline the regulations, not increase the stringency of existing requirements or impose restrictions on methane.

By the end of 2013, the scope of the changes to Regulation No. 7 were very different. The rule had transformed into one that would fill gaps in and expand upon Subpart OOOO and would be applied on a statewide basis. In addition, the rule would directly regulate methane, which the AQCC described as a "negligibly reactive ozone precursor and potent greenhouse gas." The proposed amendments were a significant increase in the scope of the existing Regulation No. 7, which was historically dedicated to the control of ozone via limits on nitrogen oxides ("NO_x") and volatile VOCs in the ozone nonattainment area along Colorado's Front Range and in near-nonattainment areas.[3]

The changes to the AQCC rulemaking in general, and Regulation No. 7 in particular, were driven by concerns associated with the local bans and moratoria discussed above. What had been an isolated act by Longmont that was fully expected to be overturned in the courts, had become a much bigger issue. The state and many in industry were relatively confident of winning the court battles, but were concerned that this would simply fuel a push for a voter initiative to amend the Colorado Constitution to either ban fracking on a statewide basis or, more likely, expressly allow local governments to do so on a case-by-case basis.

Mixed Industry Support

In the end, a number of oil and gas producers worked with the AQCC on the expanded rules and supported their adoption. The apparent motivation was that the ability to tout the nation's most stringent oil and gas air emissions regulations would assuage voter concerns and either prevent a voter initiative or form a strong talking point in the public opinion campaign to defeat such an initiative. In addition, certain large operators had already voluntarily adopted many of the measures that were included in the rulemaking, as a form of "good neighbor" community outreach. Thus, there was no reason for them to oppose the rules.

[3] For now, the new requirements are "state-only"; however, future revisions to the National Ambient Air Quality Standards for ozone could result in a move to incorporate the new requirements into the State Implementation Plan.

Of course, many in the industry had not voluntarily adopted the more stringent control practices and were strongly opposed to the expanded regulations, viewing them as costly, burdensome, and unnecessary. In fact, given the split of opinions among its members, there was some debate over whether it was appropriate for COGA to oppose the final rule.

The Story After Finalization of New Regulation No. 7

Local Bans/Moratoria Are Being Overturned

As expected, the local bans on oil and gas activities and hydraulic fracturing are being overturned by the state's courts. On July 24, 2014, a Colorado district court granted summary judgment to the plaintiffs in *COGA v. City of Longmont*, No. 13CV63, holding that the Longmont ban was invalid due to preemption by the Colorado Oil and Gas Conservation Act.[4] The plaintiffs won summary judgment in *COGA v. City of Fort Collins*, No. 13CV31385, on August 7, 2014.[5] The plaintiffs won summary judgment in *COGA v. City of Lafayette*, No. 13CV31746, on August 27, 2014.[6]

COGA's declaratory judgment suit against Broomfield commenced on November 24, 2014, after the summary judgment wins against Longmont, Fort Collins, and Lafayette, and this case is still pending.[7] Boulder County's fracking moratorium has not yet been challenged. Despite the losses in other jurisdictions, on November 13, 2014, the county voted to extend its moratorium until July 2018.

Longmont's July 2012 ordinance has survived because COGA and other plaintiffs voluntarily withdrew from the lawsuit. The withdrawal came after the city and the only oil and gas operator with interests within the city limits entered into a negotiated agreement.

Regulation No. 7's Impact on Ballot Initiative is Uncertain

It is unclear what impact the Regulation No. 7 amendments had on influencing Colorado's ongoing debates over the regulation of hydraulic fracturing. Voters in the City of Loveland narrowly defeated a two-year fracking moratorium ballot initiative in June 2014. However, a "Colorado Right to Local Self-Government Amendment" statewide initiative was proposed and was likely to make the November 2014 ballot.[8] Industry and environmental advocacy groups were gearing up for a major public opinion contest over the potential amendment.

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[4] *See* http://www.scribd.com/doc/234995530/13CV63-Order-Granting-Motions-for-Summary-Judgment.

[5] *See* http://www.fcgov.com/cityattorney/pdf/36_order_granting_plaintiffs_motion_summary.pdf?1407880843.

[6] *See* http://www.scribd.com/doc/237939608/Order-Granting-Motion-of-Summary-Judgment-in-COGA-vs-City-of-Lafayette.

[7] Available at: http://www.nortonrosefulbright.com/files/20141202-broomfield-colorado-complaint-123739.pdf

[8] The ballot initiative would have asked the following:

> "Shall there be an amendment to the Colorado constitution concerning a right to local self-government, and, in connection therewith, declaring that the people have an inherent right to local self-government in counties and municipalities, including the power to enact laws to establish and protect fundamental rights of individuals, communities, and nature and the power to define or

The Local Self-Government initiative was withdrawn due to a compromise brokered by Governor Hickenlooper, who saw the fracking issue as difficult and potentially damaging for democratic candidates, in particular U.S. Senator Mark Udall. In return for withdrawal of the proposed ballot initiative, Colorado established a blue-ribbon task force, composed of local government, industry, and conservation community representatives to identify policy proposals to address the concerns of Colorado residents.

Ultimately, Senator Udall was defeated by now-Senator Cory Gardner and, although the task force submitted nine policy recommendations to the Governor in February 2015, some believe it has been much ado about nothing because the task force was unable to identify a compromise recommendation regarding the central issues of local control over oil and gas and the siting of new oil and gas wells. In light of the inability to settle these issues, there have been threats of a local control ballot initiative for the 2016 election cycle.

Regulation No. 7's Potential Influence on Future Agency Rules

Colorado's amendment to Regulation No. 7 has been cited repeatedly and often by environmental advocacy groups in oral and written comments submitted to other regulatory agencies considering expanded regulations for the oil and gas sector. For example, numerous commentators mentioned Regulation No. 7 during a hearing before the Bureau of Land Management on that agency's plan to revise its venting and flaring regulations.[9]

In addition, it appears likely that the U.S. EPA will draw on Regulation No. 7 in creating its upcoming proposal to amend NSPS Subpart OOOO to specifically address GHG emissions. This makes sense, given that Regulation No. 7 was developed by the AQCC to fill what that agency perceived to be gaps in Subpart OOOO.

Ultimately, the influence of Regulation No. 7 remains to be seen. The new rules could easily have been adopted as VOC controls without any mention of climate change. However, simply by being the first oil and gas regulations explicitly stated as addressing methane emissions, Regulation No. 7 has sparked additional discussions by other agencies and has heightened the expectations of groups advocating for GHG emissions controls.

Summary of Regulation No. 7

There is very little grandfathering in Regulation No. 7, which means most existing oil and gas facilities are subject to the same requirements as new facilities. In general, existing facilities were to be in compliance by May 1, 2015.[10] New facilities must generally be in compliance

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eliminate the rights and powers of corporations or business entities to prevent them from interfering with those fundamental rights; and declaring that such local laws are not subject to preemption by any federal, state, or international laws?"

[9] The hearing was on the BLM's proposed venting and flaring rulemaking and was held in Golden, Colorado on March 19, 2014.

[10] Given the structure of the federal NSPS, amendments to Subpart OOOO would not apply to existing facilities. However, the EPA may seek to establish Emissions Guidelines for existing operations pursuant to Section 111(d) of the Clean Air Act. The scope of the agency's authority under 111(d) is somewhat uncertain due to a possible statutory prohibition on using 111(d) for source categories subject to a Maximum Achievable Control Technology

upon startup, although certain requirements provide a grace period of 30 to 90 days. Significant requirements are outlined below.

- General requirement for prevention of emissions. *All* intermediate hydrocarbon liquids[11] handling operations, regardless of size, must be designed, operated, and maintained to minimize the leakage of hydrocarbons, "to the extent reasonably practicable." In addition, a previous provision requires that the facility and air pollution control equipment must be maintained and operated in a manner consistent with good air pollution control requirements.[12]

  - The new "to the extent reasonably practicable" standard is more stringent than the previous "good engineering and maintenance practices" standard.

  - Under these provisions, issues such as open or improperly sealed thief hatches would presumably be violations of the general standards.

- Adequate Design for Control Devices. All air pollution control equipment must be adequately designed and sized to achieve the required control efficiency rates and to handle reasonably foreseeable fluctuations in emissions of hydrocarbons during normal operations. "Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable."[13]

- Control stringency. Control efficiency was generally changed from 95% control of *VOCs* to 95% control of *hydrocarbons*, except combustion devices must have a design hydrocarbon destruction efficiency of at least 98% (unless authorized by permit before May 1, 2014).[14] Combustion devices must be enclosed, have no visible emissions during normal operations, and be equipped with an auto-igniter.[15]

- Storage tanks. Control requirements for condensate storage tanks apply to E&P operations, compressor stations, and natural gas processing plants. The previous requirements for condensate storage tanks were extended to apply to crude oil and produced water tanks and a VOC trigger threshold was lowered from 20 to 6 tons per year ("tpy") of actual *uncontrolled* emissions from all tanks manifolded together.[16] The manifolding provision and a threshold based on uncontrolled emissions makes the Regulation No. 7 threshold more stringent than NSPS Subpart OOOO. In addition:

Standard. This issue is central to challenges to the EPA's not-yet-finalized Clean Power Plan for existing electrical generating units and will very likely be clarified in future litigation.

[11] Intermediate hydrocarbon liquid means "any naturally occurring, unrefined petroleum liquid. 5 CCR 1009 Section XVII.A.9.

[12] 5 CCR 1009 Section XVII.B.1.

[13] 5 CCR 1009 Section XVII.B.2.

[14] *See, e.g.*, 5 CCR 1009 Section XVII.C.1.b.

[15] 5 CCR 1009 Section XVII.B.2.

[16] 5 CCR 1009 Section XVII.C.

- Controls are required for the 90 days after first production, if projected VOC emissions over that period are 1.5 tpy or more.

- Owners and operators must route all hydrocarbon emissions to controls without venting from the thief hatch or other access points during normal operation, unless venting is reasonably required for maintenance, gauging, or safety.

- A Storage Tank Emissions Management System ("STEM") plan is required for controlled tanks storing unstabilized liquids. STEM plans must include monitoring practices, operational practices, and/or other strategies; procedures for evaluating emission capture performance; and monitoring pursuant to Approved Instrument Monitoring Method ("AIMM") inspections.

- AIMM inspections are conducted using flame ionization, infrared camera, or other approved devices on a monthly, quarterly, or annual basis, depending on uncontrolled actual VOC emissions.[17] Storage tanks with emissions between 6 and 12 tpy must be inspected annually. Emissions between 12 and 50 tpy trigger quarterly monitoring. Tanks with emissions greater than 50 tpy must be monitored monthly.

- Audio, visual, olfactory ("AVO") inspections are required of the storage tank and any associated equipment at the same frequency as liquids are loaded out from the tank. Regardless of loadout frequency, AVO inspections are not required more than once per 7 days and must be conducted at least once per 31 days. The AVO inspections must cover thief hatches, PRVs, pilot lights, auto-igniters, and other elements of control devices. Unsafe, difficult, or inaccessible to monitor equipment must be monitored when it becomes feasible to do so.

- Pneumatic controllers. All high-bleed pneumatic controllers are being phased out, except for those specifically approved by the agency based on safety and/or process needs. Low-bleed pneumatic controllers are allowed, unless on-site electrical grid power is used, in which case no-bleed controllers are required.

- Well production facilities. Leak Detection and Repair ("LDAR") instrument monitoring and AVO inspections are required for well production facilities.[18] Depending on emissions, the LDAR requirements range from a single monitoring event to monthly recurring events. Recordkeeping requirements will be extensive and there is no mechanism for reduced monitoring based on low-leak percentages.[19] AVOs are required on a monthly basis. In addition:

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[17] Consistent with the "no venting" standard, there is no numeric leak definition for storage vessels. Instead, the owner or operator must keep records, including the date and duration of any period where a thief hatch, pressure relief device, or other access point are "found to be venting hydrocarbon emissions."

[18] For well production facilities, a "leak" is defined as quantitative measurement (e.g., EPA Method 21) of a hydrocarbon concentration of more than 500 ppm not associated with normal operations. For purposes of IR camera monitoring or AVOs, a leak is any detectable emissions not associated with normal operations.

[19] 5 CCR 1009 Section XVII.F.3.

- Monitoring frequency is based on the uncontrolled actual VOC emissions from the highest emitting storage tank. A single initial monitoring event is required if emissions are less than or equal to 6 tpy. Annual monitoring is required for emissions between 6 and 12 tpy. Quarterly monitoring is required for emissions between 12 and 20 tpy. Monthly monitoring is required if emissions are greater than 20 tpy.

- Otherwise, if there are no oil or condensate storage tanks, monitoring frequency is based on the total uncontrolled actual point source and fugitive VOC emissions for all permanent equipment at the well production facility. The frequency thresholds are the same as in the bullet above, except the 20 tpy threshold is a 50 tpy threshold.

- Gas from a separator, produced in normal operation from newly constructed, hydraulically fractured, or recompleted oil and gas wells, must be controlled or routed to a gas gathering line.

- Owners and operators must use best management practices to minimize hydrocarbon emissions and the need for well venting associated with downhole well maintenance and liquids unloading, unless venting is necessary for safety.

- Natural gas compressor stations. LDAR instrument monitoring is required for natural gas compressor stations.[20] Depending on emissions, the monitoring frequency will be monthly, quarterly, or annual. As with LDAR requirements for well production facilities, recordkeeping requirements will be extensive and there is no mechanism for reduced monitoring based on low-leak percentages.

  - If fugitive emissions are 12 tpy or less, annual monitoring is required. If fugitive emissions are between 12 and 50 tpy, quarterly monitoring is required. If fugitive emissions are greater than 50 tpy, annual monitoring is required.[21]

  - Open-ended valves or lines must be equipped with a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations requiring use of the valve or line.[22]

- Compressors. Uncontrolled actual hydrocarbon emissions from wet seal fluid degassing systems on wet seal centrifugal compressors must be reduced by at least 95%. Rod packing on reciprocating compressors at natural gas compressor stations must be replaced

---

[20] For natural gas compressor stations, the numerical leak definition depends on the construction date of the facility. Facilities constructed before May 1, 2014, have a leak definition of 2,000 ppm of hydrocarbons. Facilities constructed on or after that date have a leak definition of 500 ppm of hydrocarbons. If IR camera inspections are used, and for AVOs, a leak is any detectable emissions not associated with normal operations.

[21] For purposes of determining monitoring frequency, fugitive emissions must be calculated using the emissions factors in Table 2-4 of the 1995 EPA Protocol for Equipment Leak Emission Estimates (Document EPA-453/R-95-017), or another Division approved method. These are uncontrolled emissions.

[22] 5 CCR 1009 Section XVII.B.3.a.

every 26,000 hours of operation or every 36 months. Compressors are exempt if they are subject to NSPS Subpart OOOO.[23]

- Glycol natural gas dehydration equipment. Still vents and vents from any flash separator or flash tank on a glycol dehydrator located at an E&P site, a compressor station, or a gas processing plant are subject to controls, depending on uncontrolled actual emissions and date of construction. If constructed before May 1, 2015, controls are required if VOC emissions exceed 6 tpy. Otherwise, controls are required if emissions exceed 2 tpy.[24]

- Well Maintenance and Liquids Unloading. Best Management Practices are required to minimize hydrocarbon emissions and the need for well venting associated with downhole maintenance (unless venting is needed for safety).

    - During liquids unloading events, any means of creating differential pressure must be used to attempt to unload liquids without venting. If unsuccessful, the well may be vented to atmosphere to unload the well.

    - The owner or operator must be present on-site during any planned well maintenance or liquids unloading event and must ensure that any venting to atmosphere is limited to the maximum extent possible.

[23] 5 CCR 1009 Section XVII.B.3.

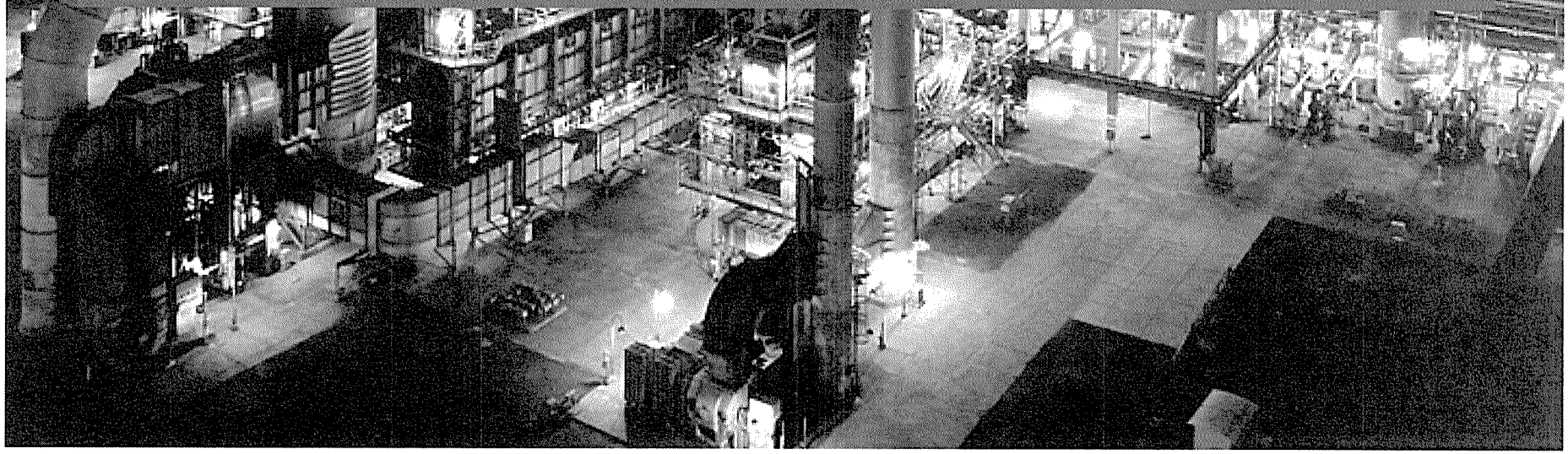
[24] 5 CCR 1009 Section XVII.D.4.

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Methane in the Oil Patch

Bob Greenslade
Senior Associate
Norton Rose Fulbright US LLP
Date



Not Covered: Meth in the Oil Patch

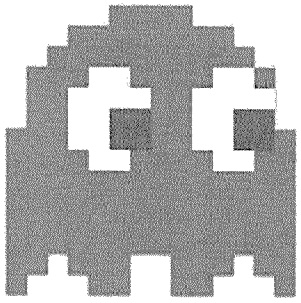


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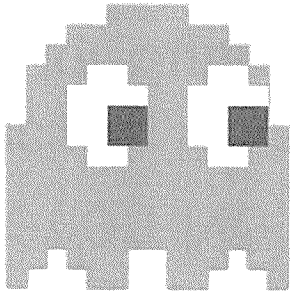
Overview

- Why the focus on methane?
- Introduction to Colorado's Regulation No. 7
  - First state rules explicitly limiting methane
- Background
  - Local fracking bans/moratoria in five jurisdictions
  - Evolution of the rulemaking
- Impacts of Regulation No. 7
  - Effects on anti-fracking initiatives uncertain
  - Possible template for Subpart OOOO amendments
- Summary of rule requirements

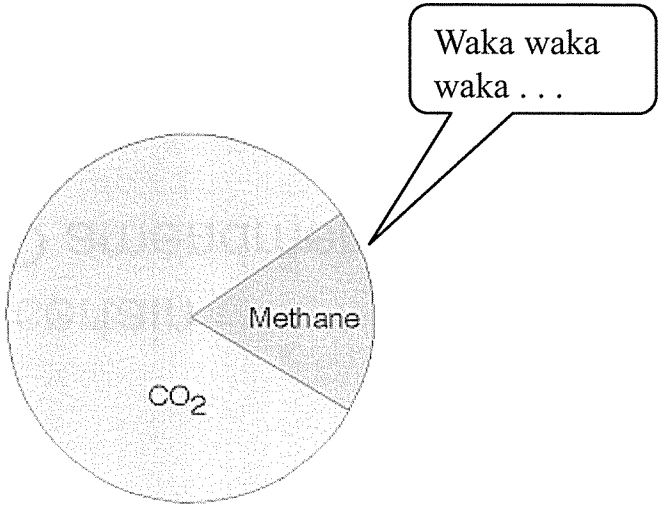
Why the Focus on Methane?



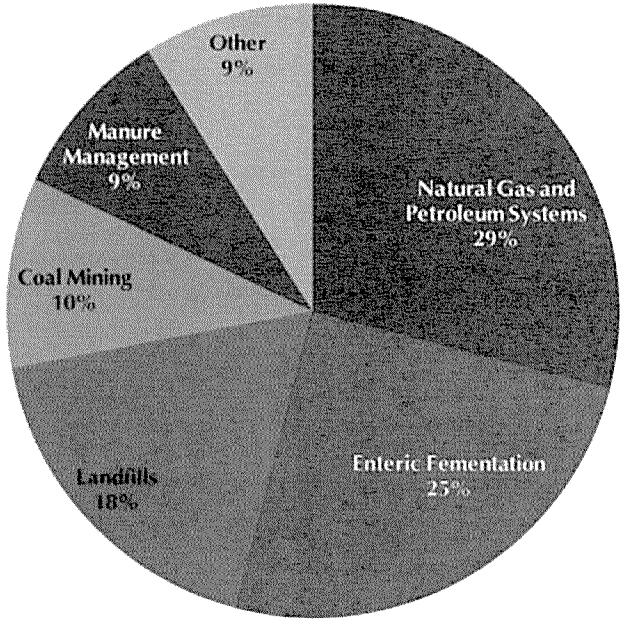
U.S. EPA



Colorado



- No. 2 GHG after CO_2
- Greater warming potential than CO_2
  - Over 100 years: 21 to 34x
  - Over 20 years: 72 to 86x



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Amended Regulation No. 7: Colorado's Methane/Hydrocarbon Regulations

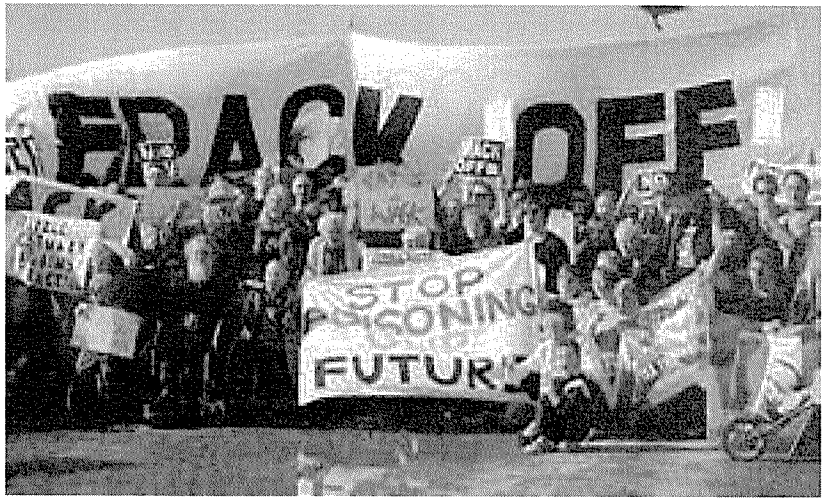
- First state regulations for methane (February 2014)

- Evolved from a minor rule to adopt NSPS OOOO
  - Became more stringent/filled perceived gaps
  - VOCs expanded to hydrocarbons
  - Expanded to apply statewide
  - Some industry support

- Basis: Statute specifically mentions "hydrocarbons"
  - "Methane is a potent greenhouse gas, which contributes to global climate change."
  - Climate change poses serious threats (flooding, fires, etc.)

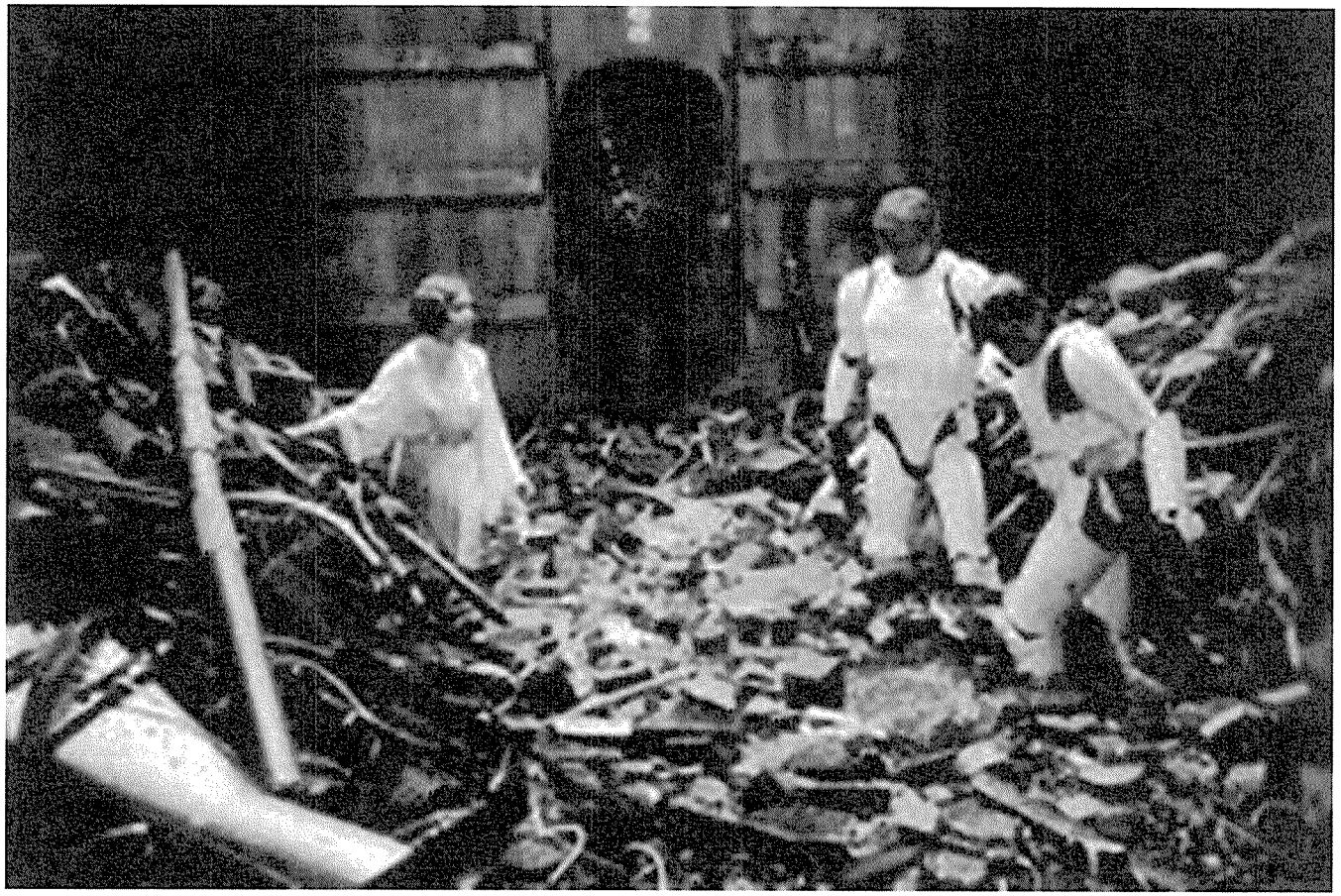
Background: Local Bans/Moratoria

- Mid-July 2012: Longmont City Council
  - General ban on drilling in residential areas
    - Exception for stranded minerals
- November 2012: Longmont voters
  - Outright ban – no exception
- Four jurisdictions in 2013
  - Boulder
  - Fort Collins
  - Lafayette
  - Broomfield



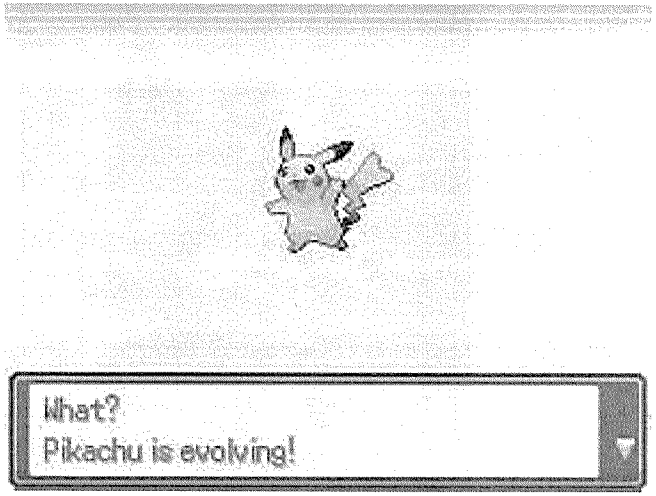
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“I have a bad feeling about this . . . .”



Regulation No. 7 Proposal Evolved

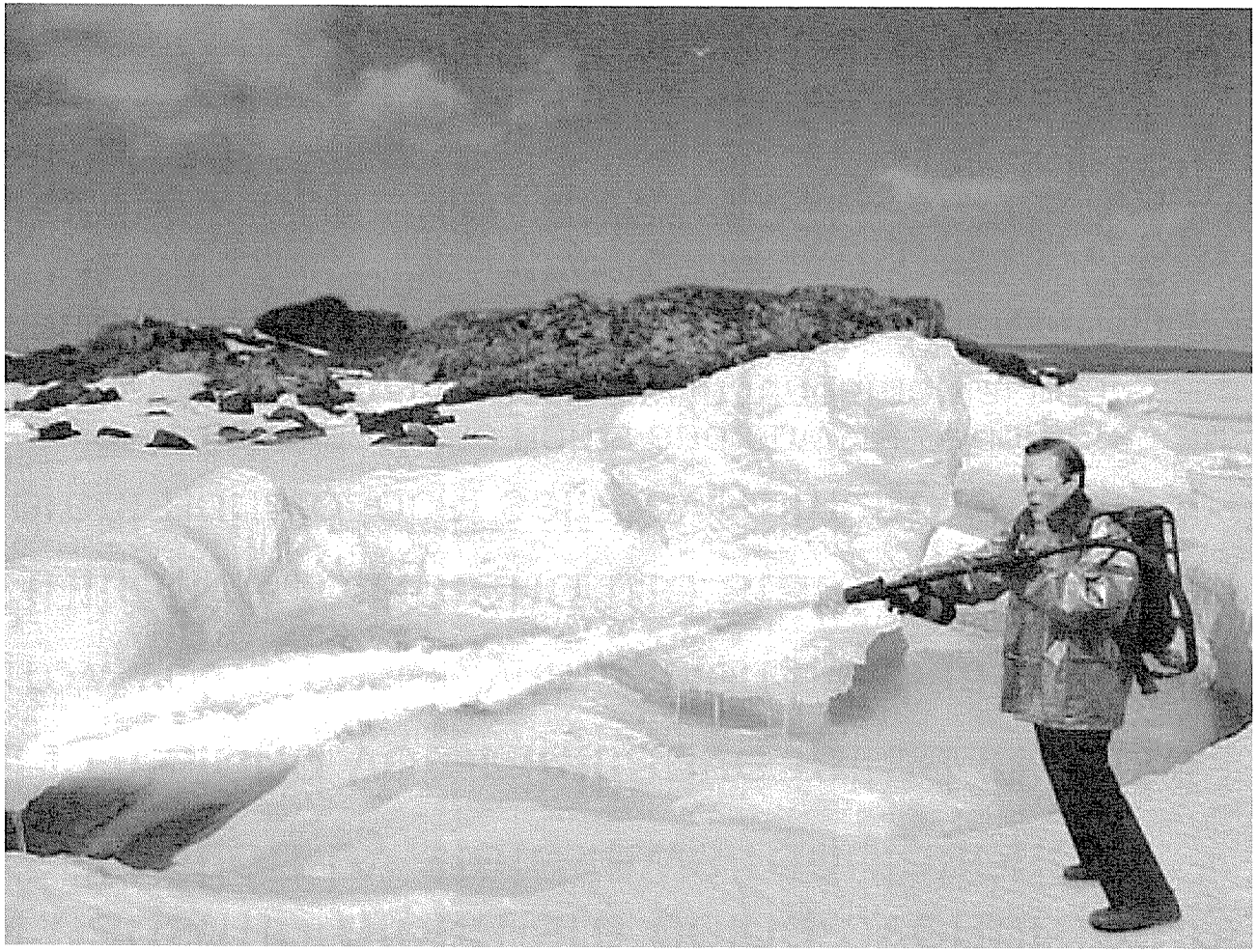
- Original rule package was minor
  - Incorporate Subpart OOOO into state rules
  - Modest changes to permitting



- Became more stringent
  - Response to public opinion
  - Some industry support
    - Defense against statewide initiatives
    - Some operators had already adopted voluntary controls

Outcomes

- Local bans/moratoria are being overturned based on preemption by state laws/regulations
- Local Loveland voter initiative failed in 2014
  - Narrow vote - possibly impacted by litigation fears
- But: Initiative to amend the state constitution
  - Inherent right to local self-government
    - Power to "eliminate the rights and powers of corporations" to prevent them from interfering with fundamental rights.
    - Declare that local laws are not subject to preemption by federal, state, or international laws.
  - Withdrawn: Compromise to create a blue-ribbon task force
    - Task force has not resolved fundamental issues



The ONION, America's Finest News Source (Dec. 18, 2006)

"Al Gore deliberately attempted to raise the earth's temperature in order to boost box office receipts for *An Inconvenient Truth*."

Potential Influence of Regulation No. 7

- Could have been passed as VOC controls
  - But it's still the first and has symbolic power
- Frequently mentioned in rulemaking hearings
  - E.g., BLM's Venting and Flaring Amendments
- May be used by U.S. EPA for Subpart OOOO

Regulation No. 7 Requirements

- Covers both new and existing sources
- General duty to minimize hydrocarbon emissions "to the extent reasonably practicable"
  - Improperly sealed thief hatches = presumed violation
- Controls must be designed to handle "reasonably foreseeable fluctuations in emissions"
  - Fluctuations from separator dumps are reasonably foreseeable.
  - 95% Control of hydrocarbons (98% for combustion)

Requirements (Cont'd)

- Storage tanks
  - Threshold: 6 tpy of actual uncontrolled VOC emissions
    - Based on all tanks manifolded for liquids
  - Storage Tank Emissions Mgmt System Plan (STEM)
    - Monitoring practices, operational practices, and/or other strategies
  - Approved Instrument Monitoring Method (AIMM)
    - Periodic instrument monitoring (up to monthly)
  - AVO inspections based on liquid loadout frequency
    - No more than once per 7 days
    - At least once per 31 days

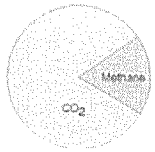
Don't Blow a Gasket



More Requirements . . .

- LDAR for well production facilities
  - Up to monthly, depending on emissions
  - IR cameras allowed
  - Leak threshold = 500 ppm
    - Or any detectable emissions if based on IR camera or AVOs

- LDAR for natural gas compressor stations
  - Up to monthly, depending on emissions
  - IR cameras allowed
  - Leak thresholds
    - 2,000 ppm if constructed before May 1, 2014
    - 500 ppm if constructed on or after May 1, 2014
    - Or any detectable emissions if based on IR camera or AVOs



. . . Again With The Requirements

- Pneumatic controllers
  - Low bleed unless exemption is specifically approved
  - No-bleed required if grid electricity is available

- Well maintenance and liquids unloading
  - BMPs must be used
  - Must attempt to unload without venting
    - May vent to atmosphere if unsuccessful
  - Owner/operator must be present during any planned well maintenance or liquids unloading event
    - Must ensure that any venting to atmosphere is limited to the maximum extent possible

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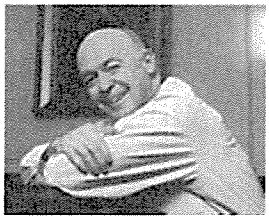
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Bob Greenslade, Senior Associate – Norton Rose Fulbright

Bob Greenslade joined the Norton Rose Fulbright Austin office in 2006 and is currently a senior associate in the Denver office. His legal practice focuses on environmental issues, including state and federal air compliance and permitting, enforcement matters, corporate due diligence and climate change. He was selected as a Texas Rising Star in 2010 and 2011.

Bob received a chemical engineering degree from Rice University in 1996 and worked as a petroleum and reservoir engineer for Amoco Exploration & Production Company and an environmental consultant with Environmental Resources Management. His prior oil and gas work experience includes reservoir management and planning and oversight for drilling, workovers, and stimulation procedures, including hydraulic fracturing. He attended law school at the University of Texas, graduating in 2006 as a member of the Chancellors and the Order of the Coif.

MEET THE ASSISTANT ATTORNEY GENERAL



John C. Cruden was confirmed by the U.S. Senate on December 16, 2014 as the Assistant Attorney General (AAG) for the Environment and Natural Resources Division (ENRD).

Before becoming AAG, Mr. Cruden served as President, the Environmental Law Institute, a nationally-recognized bipartisan organization well-known for its work in educating, publishing, and researching environment, energy, and natural resource issues.

Mr. Cruden has a long history of public service at the Department of Justice and in the military. From 1991-1995 he was the Chief, Environmental Enforcement Section, ENRD and then from 1995 to 2011 a career Deputy Assistant Attorney General for ENRD.

Before joining the Department of Justice, Mr. Cruden was the Chief Legislative Counsel of the Army. After graduating from West Point, Mr. Cruden served in Airborne, Ranger, and Special Forces units in Germany and Vietnam. After law school, he attended the Army's Judge Advocate General's year- long Graduate Course, where he was named outstanding graduate, and simultaneously obtained his Master's degree from the University of Virginia in Government and Foreign Affairs. His subsequent military assignment include: criminal prosecutor in Germany and civil trial lawyer in the Pentagon; Chief of Litigation Branch, Europe; General Counsel, Defense Nuclear Agency; Staff Judge Advocate in Germany; and Director of Administrative and Civil Law, Judge Advocate General's School, Charlottesville, Virginia. His military education includes being a Fellow, Army War College, and the Command and General Staff College.

Mr. Cruden has on three occasions received the Presidential Rank Award from three different Presidents. He has also received the Department of Justice's Muskie-Chaffee Award, the Federal Bar Association's Younger Award, and the American Bar Association's Mary C. Lawton Award for Outstanding Government Service. Mr. Cruden's military awards include the Bronze Star, Legion of Merit, Defense Meritorious Service Medal, Air Medal with Oak Leaf Clusters, and the Vietnamese Cross of Gallantry with Silver Star.

Mr. Cruden was the first government attorney to be elected and serve as the President of the District of Columbia Bar, the second largest bar in the nation. He was also the first government attorney to be selected as the Chairman of the American Bar Association's Section of Environment, Energy, and Natural Resources. He is a past member of the Board of the National Conference of Bar Presidents, the Board of the District of Columbia Bar Association, and the Judicial Conference of the District of Columbia Circuit's Standing Committee on Pro Bono Legal Services. John is a frequent lecturer for the American Bar

Association and the American Law Institute and is listed in Who's Who in the World, Who's Who in America, and Who's Who in American Law. In 2007, he was listed by a national magazine as one of the top 500 lawyers in America. In 2014 he was named as a "Legend of the Bar," by the DC Bar.

Mr. Cruden was raised in Michigan and is a graduate of the United States Military Academy, University of Santa Clara (summa cum laude, 2006 Alumni Special Achievement Award), and the University of Virginia.

He is also a volunteer swim coach for the Special Olympics and a past recipient of Fairfax County's Volunteer of the Year award for his work with mentally handicapped children. He is married and has two adult children.

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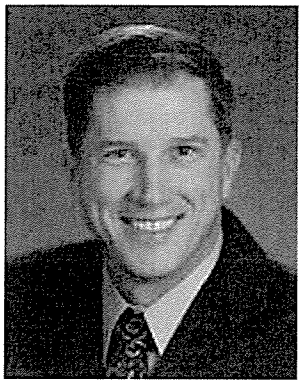
Arnoldo Medina is Senior Counsel with the Chevron Legal Department, Environmental & Safety Law Group in Houston, Texas. He advises clients on comprehensive and proactive strategies for environmental and safety law compliance, permitting, corrective action and enforcement before state and federal agencies, with a focus on air quality, biodiversity (Endangered Species Act/Migratory Bird Treaty Act/NEPA), climate change, and tight rock/unconventional resource development. Arnoldo supports upstream exploration and production assets in the U.S., including the Midcontinent Business Unit that covers Texas, New Mexico, Oklahoma, Colorado and Wyoming, as well as midstream and downstream facilities, including pipeline assets and fuel terminal facilities.

From 2003 to 2011, Arnoldo was a Senior Legal Counsel with Shell Oil Company where he advised a broad range of petroleum and chemical manufacturing, distribution, and alternative energy/fuels clients on multi-media environmental issues. Previously, he was a Senior Associate with Campbell, George, & Strong, LLP, and he represented corporate clients in environmental permitting, compliance and enforcement matters before the U.S. EPA and the TCEQ. Arnoldo began his environmental law career as a TCEQ staff attorney in the Office of Legal Services from 1997 to 2002. He worked in the areas of air quality, industrial and hazardous waste, and radioactive material regulation, permitting, and rulemaking. Arnoldo represented the Executive Director in complex legal matters before the Commission and in evidentiary contested case hearings before the State Office of Administrative Hearings.

Arnoldo earned his B.B.A. from Texas A&M University–Corpus Christi in 1992 and his J.D. from the University of Colorado School of Law in Boulder, Colorado in 1996. He graduated as the Colorado Hispanic Bar Association Outstanding Hispanic Law Graduate, the recipient of the Colorado Journal of International Environmental Law & Policy ("CJIELP") James Corbridge Leadership Award, and the CJIELP Research and Writing Award for his article on NAFTA, environmental law and emergency response issues in the Gulf of Mexico. He currently serves on the Executive Committee as Vice-Chair of the State Bar of Texas Environmental & Natural Resources Law Section.

Bryan W. Shaw, Ph.D., P.E.

Dr. Bryan W. Shaw of Elgin was appointed to the Texas Commission on Environmental Quality by Gov. Rick Perry on Nov. 1, 2007. The Texas Senate confirmed his appointment on May 5, 2009 and he was appointed chairman on Sept. 10, 2009.



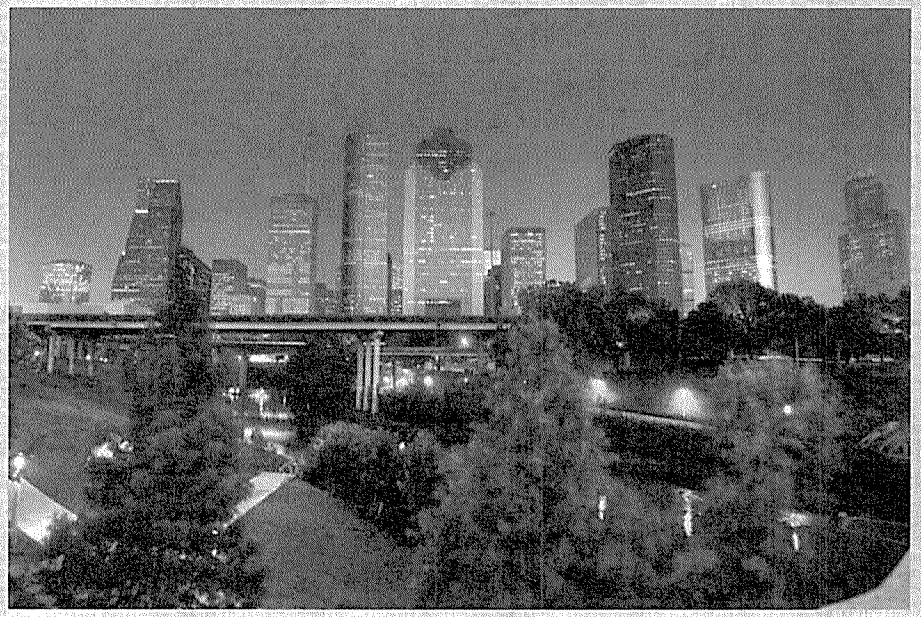
Shaw is an associate professor in the Biological and Agricultural Engineering Department of Texas A&M University (TAMU) with many of his courses focused on air pollution engineering. The majority of his research at TAMU concentrates on air pollution, air pollution abatement, dispersion model development and emission factor development. Shaw was formerly associate director of the Center for Agricultural Air Quality Engineering and Science, and formerly served as Acting Lead Scientist for Air Quality and Special Assistant to the Chief of the U.S. Department of Agriculture Natural Resources Conservation Service.

Shaw served as a member of the U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Committee on Integrated Nitrogen, as well as the EPA SAB Environmental Engineering Committee and the Ad Hoc Panel for review of EPA's Risk and Technology Review Assessment Plan. Additionally, he is a member of the U.S. Department of Agriculture–Agricultural Air Quality Task Force. Since his appointment to the TCEQ, Shaw has served on the Texas Environmental Flows Advisory Group and as chair of the Texas Advisory Panel on Federal Environmental Regulations.

Shaw received a bachelor's and master's degree in agricultural engineering from TAMU and a doctorate degree in agricultural engineering from the University of Illinois at Urbana-Champaign.

Local – State Preemption

"The Tail Wagging the Dog"



Phillip M. Goodwin, P.G.
Assistant City Attorney
City of Houston

Home Rule or General-Law Municipality?

- **Home Rule**: derives power from Texas Constitution (TEX. CONST. ART. XI, § 5; *see also* TEX. LOC. GOV'T CODE § 51.072), as may be modified or restricted by the legislature (*Wilson v. Andrews*, 10 S.W.3d 663 (Tex. 1999)).
  - May enact ordinances that are not expressly prohibited by legislature.

- **General-Law**: may exercise police power only as specifically authorized by the general laws of the United States, Texas Constitution, or federal or state law.
  - Comes in three types: Type A, Type B, or Type C
  - May adopt, publish, amend, or repeal an ordinance, rule, or police regulation that: (1) is for the good government, peace or order of the municipality or for the trade and commerce of the municipality; and (2) is necessary or property for carrying out a power granted by law to the municipality or to an office or department of the municipality.

Doctrine of Preemption

- Municipalities are generally prohibited from enacting ordinances that contradict an existing federal or state statute (Express Preemption), or contradict a matter for which the legislature intended state or federal law to fully occupy the field (Implied Preemption).
- If a reasonable construction can leave intact both a state statute and local ordinance, preemption does not occur. (*Fair v. City of Galveston*, 915 F. Supp. 873 (S.D. Tex.), *aff'd* 100 F.3d 953 (5th Cir. 1996)).

Doctrine of Preemption

- **Express Preemption**: Express Preemption occurs when a state or federal law has a provision that clearly prohibits additional regulation in that area.
  - Example: TEXAS PENAL CODE § 1.08: "No governmental subdivision or agency may enact or enforce a law that makes any conduct covered by this code an offense subject to a criminal penalty."

Doctrine of Preemption

- **Implied Preemption**:
  - If specific provisions of a local ordinance conflict with a state law (e.g., impossible to be compliant with both local and state laws simultaneously), state law preempts the local ordinance.
  - A general law and a city ordinance will not be held repugnant to each other if any other reasonable construction leaving both in effect can be reached. In other words, both will be enforced if that be possible under any reasonable construction. *City of Beaumont v. Fall*, 291 S.W. 202, 206 (Tex. 1927).

CASE LAW

- **Southern Crushed Concrete, LLC v. City of Houston (2013) (Implied Preemption)**
  - Local ordinance had more restrictive setback requirements than state law for concrete crushing operations
  - Trial court granted SJ; Appellate court affirmed, holding that "But if the state and local provisions serve different purposes, then different methods of determining compliance do not render the two provisions inconsistent. Thus, to determine if the ordinance is inconsistent with state legislation, we begin by comparing the purpose of each.
  - Supreme Court reversed, citing TEX. CONST. ART. XI, § 5 ("[N]o ordinance shall contain any provision inconsistent with…the general laws enacted by the Legislature of this State") Since TCEQ granted the permit authorizing the facility, which did not violate state law, but the City would not grant municipal permit, the municipal ordinance was preempted. City unsuccessfully argued that a land use ordinance is not preempted by an air quality statute (differing purposes); majority held that this argument could almost always be used to circumvent preemption and allow contradiction of state law, effectively mooting the permitting process performed by TCEQ.
  - Outcome indicates that Supreme Court will NOT look to the stated purpose of the local ordinance, but will rather look at the effect of the ordinance vs. state law – if a conflict arises the ordinance is invalid.

CASE LAW

- **BCCAAG v. City of Houston (Implied Preemption)**
  - Local ordinance has concurrent air pollution abatement program (registration and fee); BCCAAG argues that it is preempted by Texas Clean Air Act
  - The City argues that there is a reasonable construction that would preserve both laws
  - The Texas Clean Air Act expressly allows municipal regulation so long as it is consistent and does not make unlawful what the state makes lawful
  - Appellate court held ordinance is not inconsistent with state law (though there is "considerable overlap")
  - BCCAAG argues that ordinance would make it unlawful for business to operate without local registration – even though TCEQ already issued permit authorizing operation.
  - Scheduled for argument before Texas Supreme Court on September 2, 2015 – STAY TUNED

RECENT LEGISLATIVE MOVEMENT TOWARD EXPRESS PREEMPTION

- Examples of bills passed in this legislative session:
  - HB40 – Prohibits local governments from regulating oil and gas activities
  - HB1794 – maintains local governments' right to pursue civil enforcement of environmental violations but severely restricts ability to assess penalties.
- Examples of unsuccessful attempts to preempt local regulation in this legislative session:
  - SB440 – Preempts local control over fracking (effectively passed in HB40)
  - SB1673 – Sought to preempt ANY local ordinance, rule, or regulation that conflicts with or is more stringent than state level laws
  - HB540 – Preempts any local ordinance that establishes stronger protections than state law
  - SB1673 – Preempts any activity licensed at the state level
  - SB360 – Preempts all local control over the use of private property
  - HB3263, SB1673, SB3263 – Preempts all local regulation over payday-lending operations
  - SB1806 – Creates statutory definition of preemption that expands preemption beyond what the case law has held; additionally preempts any municipal ban on the use of single-use plastic bags

Questions?



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Mr. Goodwin graduated from Albion College, B.A., and from South Texas College of Law, J.D., where he was president of its Environmental Law Society. He is a past Chairman of the Environmental Law Section of the Austin Bar Association and is a current Board Member of the Environmental Law Section of the Houston Bar Association. In addition to being an attorney, Mr. Goodwin is also a Geologist licensed by the Texas Board of Professional Geoscientists.

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PREEMPTION OF NUISANCE CLAIMS BY THE FEDERAL CLEAN AIR ACT: THE NEED FOR SUPREME COURT RESOLUTION

By

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INTRODUCTION

The ancient tort of nuisance has shown surprising vitality over the past few years. Some observers may have counted the tort "down and out" after it was strongly rejected in lead paint[3] and climate change cases.[4] Despite these defeats, the tort has recently produced new Pattern Jury Charges,[5] a significant verdict,[6] and an important intermediate appellate decision in Texas state courts,[7] as well as a huge lead paint judgment in California and a major lawsuit against the pharmaceutical industry.

In California, a state court judge recently ordered three producers of lead-based paints and pigments to pay $1.15 billion into a fund for public education as well as for inspection and abatement of all pre-1980 privately owned homes in various counties.[8] Another major nuisance action was subsequently filed in Los Angeles against pharmaceutical manufacturers[9] based upon the same theory, namely, that the defendants

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[3] *See, e.g., State v. Lead Industries Ass'n,* 961 A.2d 428 (R.I. 2008); *In re Lead Paint Litig.*, 924 A.2d 484, 499 (N.J. 2007) (rejecting public nuisance liability against lead paint and pigment manufacturers).

[4] *See American Electric Power v. Connecticut*, 131 S.Ct. 2527 (2011); *Native Village of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012)(declining to impose public nuisance liability against greenhouse gas emitters for climate change).

[5] *See generally,* Eric J. Mayer and Brian Lowenberg, *Nuisance Joins the PJC*, THE ADVOCATE 54 (Winter 2012).

[6] *See* Jim Fuquay, *Two Different Verdicts on Nuisance Lawsuits in Barnett Shale*, available at http://blogs.star-telegram.com/barnett_shale/2014/04/two-different-verdicts-on-private-nuisance-lawsuits-in-barnett-shale.html (reporting on $2.9 million jury award in Tarrant County district court).

[7] *See Sciscoe v. Enbridge Gathering (North Texas), L.P.,* No. 07-13-00391-CV (Tex. App. – Amarillo, June 1, 2015), available at file:///C:/Documents%20and%20Settings/rfaulk/My%20Documents/Downloads/AppellateOpinion.pdf

[8] *See* Amended Statement of Decision and (second) Amended Statement of Decision in *The People of the State of California v. Atlantic Richfield Co., et al*, Case No. 1-00-CV-788657 (Superior Court, County of Santa Clara, March 28, 2014), *appeal pending*, No. H040880, California Court of Appeal (6th Dist.).

[9] *See The People of the State of California v. Purdue Pharma L.P., et al.,* No. 30-2014-00725287-CU-BT-CXC (Superior Court, County of Orange) at 94-97, *filed* May 21, 2014, copy of complaint available at http://documents.latimes.com/counties-sue-narcotics-makers/ (last visited October 23, 2014).

created a nuisance by the "promotion" of their products with knowledge that they were dangerous to human health.[10]

Although the U.S. Supreme Court rejected nuisance as a vehicle to control greenhouse gas emissions in *American Electric Power v. Connecticut,*[11] ("AEP"), the use of the tort regarding more conventional air pollutants has found more receptive ears in the nation's federal and state trial and appellate courts. Given the Supreme Court's unanimous rejection of nuisance as a regulatory tool to control emissions in *AEP*, many advocates were surprised when the Court denied certiorari in *Bell v. Cheswick Generating Station* [12] ("*Bell*") – a case in which plaintiffs filed nuisance claims to reduce emissions of pollutants even though the facility involved was in compliance with permits issued under the Clean Air Act ("CAA").[13]

The surprise was even greater when the Iowa Supreme Court followed *Bell* in *Freeman v. Grain Processing Corp.*[14] and allowed nuisance claims to allow against another compliant facility – and extended *Bell's* reasoning to allow challenges to

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[10] Liability for "promotional" public nuisance in California stems from decisions such as *County of Santa Clara v. Atlantic Richfield Co.* 137 Cal.App.4th 292, 309-10 (2006). In *Santa Clara,* the court held that merely manufacturing or distributing lead paint or failing to warn of its hazards were not sufficient to state a public nuisance claim. *Id.* at 310. Instead, plaintiffs must allege that the defendant engaged in the "affirmative promotion of lead paint for interior use," *Id.* at 310, that the defendant engaged in this affirmative promotion "with knowledge of the public hazard that such use would create," *Id.* at 309, and that the defendant's promotional activities "assisted in the creation of a hazardous condition." *Id.* at 309-10.

[11] 131 S.Ct. 2527 (2011).

[12] 734 F.3d 188 (3d Cir. 2013), *cert. denied*, 134 S. Ct. 2696 (2014).

[13] On March 14, 2014, a federal district court in Kentucky agreed with *Bell* and held that the Clean Air Act ("CAA") does not preempt state tort claims brought by private property owners against sources of air pollution under the common law of the source's home state. *Merrick v. Diageo Americas Supply, Inc.*, 5 F. Supp. 3d 865 (W.D. Ky. 2014). The defendant has appealed to the Sixth Circuit. *See Diageo Americas Supply, Inc. v. Merrick,* No. 14-6198 (6th Cir., docketed October 1, 2014).

[14] 848 N.W.2d 58 (Iowa 2014).

"grandfathered" equipment expressly permitted by the CAA. According to the Iowa Supreme Court, plaintiffs can use nuisance actions to force replacement and upgrading of equipment even though federal permits allow such "grandfathered" equipment to remain until major facility upgrades are undertaken.[15]

In contrast to the holdings in *Bell* and *Freeman*, prior decisions from the Fourth Circuit and other federal courts had largely rejected the use of nuisance litigation as an alternative method of air pollution control. In *North Carolina ex. Rel. Cooper v. Tennessee Valley Authority* ("TVA"),[16] for example, the Fourth Circuit held that nuisance claims regarding air pollution were preempted by the CAA because they were "an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."[17] Although the Supreme Court denied certiorari in *Bell* and *Freeman*, the question remains active in the federal appellate courts. On March 14, 2014, a federal district court in Kentucky agreed with *Bell* and held that the Clean Air Act ("CAA") does not preempt state tort claims brought by private property owners against sources of air pollution under the common law of the source's home state.[18] The defendant has appealed to the Sixth Circuit.[19]

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[15] *Id.* at 74.

[16] 615 F.2d 291, 306 (4th Cir. 2010).

[17] *Id.* at 302.

[18] *Merrick v. Diageo Americas Supply, Inc.*, 5 F. Supp. 3d 865 (W.D. Ky. 2014).

[19] *See Diageo Americas Supply, Inc. v. Merrick,* No. 14-6198 (6th Cir., docketed October 1, 2014); *see generally,* Richard O. Faulk, *Struggle over Federal Environmental Law Preemption of Public Nuisance Suits Heats Up in Kentucky,* WASH. LEG. FOUND. LEGAL PULSE (Jan. 2, 2015), available at http://wlflegalpulse.com/2015/01/02/struggle-over-federal-environmental-law-preemption-of-public-nuisance-suits-heats-up-in-kentucky/

Given the United States Supreme Court's deliberate decision to remand state nuisance claims for disposition in *AEP*, the High Court's reluctance to review the use of nuisance as a vehicle to regulate air pollution is perplexing. The urgency of this question is underscored by the persistent pursuit of nuisance as an alternative means to control air pollution – a pursuit that, if allowed to continue, will create a confusing and, ultimately, destructive "dual track" system where federal agencies and courts use conflicting standards to redress the same concerns. Granting review offers an important opportunity for the Supreme Court to clarify the respective roles of federal and state regulatory authorities and courts in air pollution control. Even if this cannot be accomplished at the federal level, the Texas Supreme Court may yet have an opportunity to review the intermediate court's decision in *Sciscoe* – potentially deciding the preemption question under Texas state law.

THE IMPORTANCE OF SUPREME COURT REVIEW

The arguments in cases involving preemption of nuisance claims regarding air pollution typically frame strikingly different positions about how air pollution in the United States should be controlled. On the one hand, facility owners argue that the CAA sets forth a comprehensive system of cooperative federalism under which a unitary permitting program governs emission levels by each source and under which the exclusive methods for controlling air pollution are specified. On the other hand, neighboring residents assert that the CAA's system exists concurrently with common law remedies under state law, such as nuisance, under which emissions can be controlled by

equitable relief and influenced by awards of money damages. They insist that such relief is available even when sources are in full compliance with CAA permits.

These controversies present ideal opportunities to resolve the lingering question presented by the remand of *AEP*, in which the Court decided that nuisance claims under *federal* common law were "displaced" by the CAA, but remanded the question of whether *state* claims were preempted to the Second Circuit for consideration.[20] After remand, the Second Circuit was unable to resolve the issue because plaintiffs withdrew their complaints.[21] Nevertheless, the issue then arose in other federal and state courts – which reached an array of conflicting decisions.[22] As a result, there is not only a significant split between decisions in the Circuit Courts, but also between and within the judiciaries of states – creating a confusing quagmire of conflicting decisions that is especially ripe for the Supreme Court's review and clarification.

The Supreme Court's refusal to review *Bell* earlier this year also leaves state courts in conflict, most notably in Kentucky, where dueling state courts have reached conflicting results. A major cause of the conflicts described above results from results from holdings in *Bell* and *Freeman* that the "savings clauses" of the CAA and the Clean Water Act ("CWA") should be similarly construed to preserve nuisance claims under state law. There are, however, significant differences between the savings clauses in the

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[20] *See* 131 S.Ct. at 2540 ("None of the parties have briefed preemption or otherwise addressed the availability of a claim under state nuisance law. We therefore leave the matter open for consideration on remand.").

[21] *See Connecticut v. AEP – The End is Very Near,* available at http://climatelawyers.com/post/2011/09/21/Connecticut-v-AEP-The-End-Is-Very-Near.aspx (last visited October 26, 2014).

[22] *See* Section II.B. *infra* at 13.

two statutes, and those distinctions demonstrate that the CAA's provisions have much greater preemptive force than those in the CWA.[23]

Whether examined as a macrocosm or a microcosm, the preemption issue remains divisive in the nation's courts – and the situation will not improve without a definitive resolution by the Supreme Court. Moreover, unless this lingering controversy is resolved, the predictability and certainty of the CAA's carefully designed permitting system will be replaced incrementally by the mutability and malleability of state common law – and the efficacy of the CAA's pollution control system will surely be compromised.[24]

A. THE "UNANSWERED QUESTIONS" OF *AEP V. CONNECTICUT* SHOULD BE ADDRESSED.

The Supreme Court has not been silent regarding the danger that nuisance litigation poses to the nation's ability to control pollution effectively. In *Int'l Paper Co. v. Ouellette*,[25] a decision involving the CWA, the Court held that interstate nuisance suits stand as "an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."[26] The Court also admonished against toleration of "common-law

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[23] *See* Section II.C. *infra* at 18.

[24] *See* Sec. II.D. *infra* at 24.

[25] 479 U.S. 481, 491-492 (1987).

[26] *Id.* at 491-492 (quoting *Hillsborough County v. Automated Medical Laboratories, Inc.*, 471 U.S. 707, 713 (1985), quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)).

suits that have the potential to undermine this regulatory structure,"[27] and singled out nuisance standards in particular as "vague" and "indeterminate."[28]

More recently, the *AEP* Court rejected an attempt to use nuisance litigation under federal common law to control air pollution. Although the issue in *AEP* concerned displacement of federal common law, rather than preemption of state common law, the same concerns justify Supreme Court review of *Freeman* and other rising cases. Significantly, the Court remanded *AEP* for consideration of the whether the CAA preempted state nuisance claims,[29] but the plaintiffs withdrew their complaints and the issue was not addressed. Since that time, other federal and state courts have addressed the preemption question – and reached conflicting decisions. Accordingly, it is a logical and essential next step to decide whether the state tort remedy is preempted. Unless that issue is reviewed by the Supreme Court, the scope and reliability of the CAA's programs will remain clouded by uncertainty.

The Supreme Court's reasoning supporting three of its holdings in *AEP* strongly supports review. The first holding clarifies the CAA's clear allocation of regulatory responsibility to "EPA in the first instance, in combination with state regulators."[30] Although the CAA requires a "complex balancing" of competing interests by administrative authorities,[31] neither *AEP* nor the CAA recognizes any role for federal or

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[27] *Id.* at 497

[28] *Id.* at 496 (quoting *City of Milwaukee v. Illinois,* 451 U.S. 304, 317 (1981)) (internal quotation marks omitted); *see also North Carolina ex. Rel. Cooper v. Tennessee Valley Authority*, 615 F.2d 291, 306 (4th Cir. 2010).

[29] *AEP*, 131 S. Ct. at 2540

[30] *Id.* at 2539.

[31] *Id.*

state courts in the balancing process that underlies air pollution control. Although parties aggrieved by administrative decisions may seek judicial review,[32] neither federal nor state courts are given the authority to interfere with that process through tort law. Indeed, the term "State or political subdivisions" has been construed consistently to *exclude* courts.[33] Moreover, Congress never intended for nuisance claims to vary federally mandated standards, limitations, or requirements. Indeed, the amorphous nature of nuisance law is essentially *standardless* and "incapable of any exact or comprehensive definition."[34] By its terms, therefore, the CAA concentrates all regulatory authority in EPA and state regulators – and "leaves no room" for judges and juries to participate by tort actions.[35] There is no reason why this plenary allocation to EPA and state regulators should not be given effect according to its terms.

A second holding in *AEP* concludes that courts lack the resources and tools needed to accomplish CAA's regulatory goals:

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[32] *Id.*

[33] *See Cannon v. Cooch,* 2011 WL 5925329 *4 (D. Del. Nov. 28, 2011)(courts are not a "public body" that includes "State or any political subdivision of the State."); *U.S. v. Amawi*, 552 F. Supp.2d 679, 680 (N.D. Ohio 2008)(judiciary is not a "government entity" that includes "any State or political subdivision thereof"); *Haudrich v. Howmedica, Inc.,* 642 N.E.2d 206 (Ill. Ct. App. 1994)(courts are not "States or political subdivisions).

[34] *See TVA*, 615 F.3d at 202 ("[w]hile public nuisance law doubtless encompasses environmental concerns, it does so at such a level of generality as to provide no standard of application. If we are to regulate smokestack emissions by the same principles we use to regulate prostitution, obstacles in highways, and bullfights, we will be hard pressed to derive any manageable criteria . . ."); *see also* RESTATEMENT (SECOND) OF TORTS § 821B cmt. e. (1979) ("[I]f a defendant's conduct ... does not come within one of the traditional categories of the common law crime of public nuisance or is not prohibited by a legislative act, *the court is acting without an established and recognized standard.*")(emphasis added); James A. Henderson, Jr., *The Lawlessness of Aggregative Torts*, 34 HOFSTRA L. REV. 329, 330 (2005). According to Professor Henderson, these amorphous tort theories are not lawless simply because they are non-traditional or court-made or because the financial stakes are high. Instead, "the lawlessness of these aggregative torts inheres in the extent to which they combine sweeping, social-engineering perspectives with vague, open-ended legal standards for determining liability and measuring damages." *Id.* at 338.

[35] *Id. at* 2538.

> It is altogether fitting that Congress designated an expert agency, here, EPA, as best suited to serve as primary regulator . . . The expert agency is surely better equipped to do the job than individual district judges issuing ad hoc, case-by-case injunctions. Federal courts lack the scientific, economic and technological resources an agency can utilize in coping with issues of this order.[36]

This holding provides the reasons why Congress entrusted the EPA with primary regulatory authority in the first instance, and empowered the agency to work in combination with state regulators.[37] Although the CAA envisions extensive cooperation between federal and state authorities,[38] the Act conspicuously fails to include the federal and state judiciary as regulators because courts are not suited for these exercises.[39]

To make these judicial disabilities crystal clear, the *AEP* Court described a number of their limitations:

> Judges may not commission scientific studies or convene groups of experts for advice, or issue rules under notice-and-comment procedures inviting input by any interested person, or seek the counsel of regulators in the States where the defendants are located. Rather, judges are confined to a record comprising the evidence the parties present. Moreover, federal district judges, sitting as sole adjudicators, lack authority to render precedential decisions binding other judges, even members of the same court.[40]

Although this language describes why federal courts are ill-equipped to create and enforce environmental policy through federal common law, the same limits also apply to state courts. Irrespective of whether the tribunal is a state or federal court, it lacks the

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[36] *Id.* at 2539-2540.

[37] *Id.* at 2539.

[38] *Id.*

[39] *See also TVA,* 615 F.3d at 305 ("[W]e doubt seriously that Congress thought that a judge holding a twelve day bench trial could evaluate more than a mere fraction of the information that regulatory bodies can consider.").

[40] 131 S. Ct. at 2540.

resources to address the complexities of air pollution control. Each forum is limited by the unique record of each particular case – and cannot bind judges in other locations to follow their reasoning and judgments.

Finally, *AEP* rejected an alarming proposal made by plaintiffs in oral argument. Notwithstanding the disabilities discussed above, counsel for the plaintiffs insisted that individual federal judges determine, in the first instance, what amount of carbon-dioxide emissions are "unreasonable" and then decide what level of reduction is "practical, feasible and economically viable."[41] These determinations would be made for the defendants named in the two lawsuits launched by the plaintiffs, but "[s]imilar lawsuits could be mounted . . . against 'thousands or hundreds or tens' of other defendants fitting the description of 'large contributors' to greenhouse gas emissions."[42] The Court unanimously rejected this proposal, holding that "the judgments the plaintiffs would commit to federal judges, in suits that could be filed in any federal district, cannot be reconciled with the decision-making scheme Congress enacted." [43]

When the claims in nuisance cases are matched with *AEP's* reasoning, it is apparent that the state tort remedy "interferes with the methods" by which the CAA "was designed to reach [its] goal," and that it has the potential "to undermine the regulatory structure."[44] In *Freeman*, for example, plaintiffs seek damages and injunctive relief to compensate them for injuries and to require emission controls and equipment upgrades

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[41] *Id.*

[42] *Id.*

[43] *Id.*

[44] *See International Paper Co. v. Ouellette*, 497 U.S. 481, 494, 497, 107 S. Ct. 805, 93 L. Ed. 2d 883 (1987).

beyond those required by permits issued under the CAA.[45] That they do so in a state court under Iowa common law, rather than in a federal court under federal common law, is a distinction without a difference. Under the reasoning of *AEP,* nuisance claims in either forum have the same disruptive and undermining effect on federal statutory and regulatory programs. Moreover, state judges do not have any greater resources or tools to address this issue than their federal counterparts. Both forums lack the scientific, economic and technological resources readily available to administrative agencies.

Given *AEP's* serious concerns about the intolerable effects of nuisance cases, and the limits of judicial power to resolve these controversies, it would be strange indeed if those problems were deemed to be resolved merely because the claim is based on state common law. If that were so, federal courts acting under *diversity* jurisdiction would be required to adjudicate nuisance claims under state law despite the disabilities that precluded them from presiding over federal nuisance claims. Surely claims that are non-justiciable under federal common law do not become justicable merely because they are made under state law. Accordingly, since the same limitations that preclude adjudication in the federal judiciary apply equally to the state judiciary, *AEP's* reasoning should apply equally to both systems.

B. Conflicts Between The Federal Circuits and Within The State Courts Should Be Resolved.

The Iowa Supreme Court's decision in *Freeman* represents just one example of the conflicting rulings that have accumulated regarding preemption of state tort remedies by the CAA. In view of the Court's denial of certiorari in *Bell*, a significant division regarding preemption persists between the Federal Circuits and within the nation's state

[45] *See Freeman,* 848 N.W.2d at 63.

courts. Only a decision by the Supreme Court can resolve these conflicts and the resulting uncertainties that threaten to exacerbate this controversy.

In *Bell*, the Third Circuit acknowledged that the Court in *AEP* "explicitly left open" the question of whether the CAA preempted nuisance claims under state law.[46] The court then held that state nuisance claims were not preempted because they were preserved by the CAA's "savings clause."[47] Other decisions have reached similar results.[48]

The Fourth Circuit, however, took a different path. In *North Carolina ex. Rel. Cooper v. Tennessee Valley Authority*,[49] the court held that basing air pollution controls on "vague public nuisance standards" is inconsistent with the CAA's regulatory system.[50] The court observed that "[t]he contrast between the defined standards of the Clean Air Act and an ill-defined omnibus tort of last resort could not be more stark,"[51] and explained that Congress "opted rather emphatically for the benefits of agency expertise in setting standards for emissions controls," especially in comparison with "judicially managed nuisance decrees."[52] As a result, the court held that "conflict preemption

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[46] 734 F.3d at 196 at n.7.

[47] *Id.* at 196-197.

[48] *See Her Majesty the Queen in Right of the Province of Ontario v. City of Detroit*, 874 F.2d 332, 343 (6th Cir. 1989); *Gutierrez v. Mobil Oil Corp.*, 798 F. Supp. 1280, 1285 (W.D. Tex. 1992). The problems with *Bell's* "savings clause" holding are examined *infra* at 18.

[49] 615 F.2d 291 (4th Cir. 2010).

[50] *Id.* at 302.

[51] *Id.* at 304,

[52] *Id.* at 305.

principles" caution against "allowing state nuisance law to contradict joint state-federal rules so meticulously drafted."[53]

Although the preemption issue has just begun its divisive run in the state courts, the early results suggest that conflicts remain the trend. For example, two Kentucky courts recently disagreed regarding CAA preemption in *Merrick* v. *Brown-Forman Corp.*[54] and *Mills* v. *Buffalo Trace Distillery, Inc.*[55] In those cases, plaintiffs brought tort claims based on ethanol emissions from distilled spirits producers in neighboring counties. Although the cases were based on similar allegations, each court reached a different decision regarding whether the emissions can be regulated beyond the limits imposed by the CAA. Significantly, *Merrick* emphasized the functional conflict preemption analysis described in *AEP, TVA*, and *Ouellette* to find the tort claims preempted – while *Mills* relied on the "savings clause" analysis used in *Bell.*[56]

This example is particularly compelling because it demonstrates that sources can be subjected to conflicting requirements by neighboring courts in the same state. Notably, even a Kentucky federal district court has waded into the controversy – exacerbating

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[53] *Id.* at 303; *see also Comer v. Murphy Oil USA, Inc.*, 839 F. Supp. 2d 849, 865 (S.D. Miss. 2012), *aff'd on other grounds*, 718 F.3d 460 (5th Cir. 2013) (state nuisance claims would require court to determine "what amount of carbon-dioxide emissions is unreasonable as well as what level of reduction is practical, feasible, and economically viable," a task "entrusted by Congress to the EPA.").

[54] Order, *Merrick* v. *Brown-Forman Corp.*, Civ. Action No. 12-CI-3382 (Jefferson Cir. Ct. (Ky.), Div. 9 July 30, 2013) (finding CAA preemption of common law claims).

[55] Opinion & Order, *Mills* v. *Buffalo Trace Distillery, Inc.*, Civ. Action No. 12-CI-743 (Franklin Cir. Ct. (Ky.), Div. II Aug. 28, 2013) (rejecting CAA preemption of common law claims).

[56] *Compare* Merrick, Order at 3-4 *with* Mills, Opinion & Order at 6; *see also* Order on Reconsideration at 2, *Merrick v. Brown-Forman Corp.*, Civ. Action No. 12-CI-3382 (Jefferson Cir. Ct. (Ky.), Div. 9 Nov. 26, 2013) (declining to reconsider ruling in light of *Bell*).

rather than clarifying the issues.[57] This emerging quandary is consistent with the Fourth Circuit's prediction that "the uncertain twists and turns of litigation will leave whole states and industries at sea and potentially expose them to a welter of conflicting court orders across the country" leading to "results that lack both clarity and legitimacy."[58] It also demonstrates that the conflicts between *TVA* and *Bell* are actively producing additional conflicts – even in states where neither case is a controlling precedent.

Given the Kentucky situation in microcosm, and the conflicts between *TVA* and *Bell* in macrocosm, the daunting dilemma described by Judge Wilkinson in *TVA* has already been realized:

> Attempting to simultaneously resolve air pollution issues using common law claims will condone the use of multiple standards throughout the nation. In various states, facilities already subject to an EPA-sanctioned state permit could be declared "nuisances" when a judge in Iowa sets one standard, a judge in a nearby state sets another, and a judge in another state sets a third. Such a scenario ultimately leads one to question "[w]hich standard is the hapless source to follow?"[59]

Such a scenario strikes at the structural heart of the CAA, namely, the Act's allocation of priorities and responsibilities within a system of cooperative federalism. When Congress passed the CAA, it "made the States and the Federal Government partners in the struggle against air pollution."[60] If courts are permitted to conduct independent evaluations under state common law, they will exercise authority that conflicts with the cooperative federalism structure created by the CAA.

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[57] *See Merrick v. Diageo Americas Supply, Inc.*, 5 F. Supp. 3d 865 (W.D. Ky. 2014)(following *Bell* and refusing to find preemption).

[58] *TVA*, 615 F.3d at 301.

[59] 615 F.3d at 302 (4th Cir. 2010) (citing *Ouellette*, 479 U.S. at 496 n. 17).

[60] *General Motors Corp. v. United States,* 496 U.S. 530, 532 (1990).

In such proceedings, the balance struck by administrative agencies could be reopened and reexamined *de novo* by nuisance lawsuits under state common law. There are no assurances or requirements that courts presiding over such actions will apply the same criteria or reach the same conclusions regarding the reasonableness of a defendant's emissions. The chaos and confusion resulting from multitudes of conflicting standards will irreparably compromise the CAA's cooperative structure.

Viewed in this light, the danger posed to the CAA's regulatory program by this case is even greater than the problems presented in *AEP*. If the Supreme Court does not review this issue, nothing will preclude nuisance actions from spreading throughout the United States. The uncoordinated proceedings will impact regulated industries in wholly unpredictable and conflicting ways. Indeed, the process by which emissions are regulated could vary not only from state to state, but also from county to county within a single state – and from facility to facility within the same company.

Nothing in the CAA remotely contemplates such confounding consequences, but they are entirely predictable if the Supreme Court does not intervene. It is time, therefore, to resolve the preemption issue remanded in *AEP* – and to protect the clear standards of the CAA's permitting programs from erosion by standardless nuisance claims under state common law.

C. Properly Interpreted, The CAA's "Savings Clauses" Do Not Preserve The Power of State courts To Impose Nuisance Remedies Under State Common Law.

One of the legal profession's most beguiling temptations is to seek consistency between superficially similar statutory regimes. Although pursuing analogies sometimes yields valuable results, it is equally important to understand *distinctions* which may

indicate divergent purposes. Both the *Bell* and *Freeman* courts fell into error by failing to appreciate the different paths taken by the CWA and the CAA in their distinct savings clauses.

In *Bell*, for example, the court focused entirely on *one* of the CAA's savings clauses to justify its decision – as opposed to analyzing how that clause, as well as other such provisions in the CAA, operated within the context of the entire statute. Based upon that limited analysis and its conclusion that there were "no meaningful differences" between the CWA and CAA savings provisions,[61] the *Bell* court concluded that applying the same preemption analysis to the two statutes should reach the same results.[62] In consequence, the *Bell* court followed the Supreme Court's holding in *Ouellette* and held that state nuisance actions were not preempted under the CAA.[63]

Nevertheless, there *are* "meaningful distinctions" between the savings provisions of the CWA and the CAA. Importantly, the CWA contains a unique and exceptionally broad savings clause that plainly preserves extraordinarily broad powers for the states. That clause provides that "nothing in this [Act] shall . . . be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States."[64] Such language is conspicuously *absent* from the CAA – thus demonstrating Congress' intent to more narrowly restrict the power of the States to regulate air pollution.

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[61] *Bell*, 734 F.3d at 192

[62] *Id.* at 196-97.

[63] *Id.*

[64] 33 U.S.C. § 1370.

Although the *Bell* court determined that the CWA's language was excluded from the CAA because, unlike water, no "jurisdictional boundaries or rights" apply to air, that conclusion overlooks Supreme Court jurisprudence that, prior to the adoption of the CAA, expressly recognized each State's exclusive interest in its air resources:

> The State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air.[65]

To the extent the CAA allows State regulatory authorities to adopt more stringent emission standards, these "independent" interests of the States as *parens patriae* remain viable.[66] Since the savings clause of the CAA is substantially narrower in focus than the expansive clause in the CWA, *the preemption analysis must focus solely on the CAA's language*, not the broader clauses of the CWA.

When that language is considered, nothing in the CAA purports to preserve claims under state common law, whether they are grounded in nuisance or any other cause of action. Instead, the Act provides:

> [N]othing in this [A]ct shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or (2) any requirement respecting control or abatement of air pollution.[67]

Significantly, this section merely preserves the rights of sovereign entities, i.e. "States" and "political subdivisions" to set more conservative emission standards by statutes or regulations than those provided by CAA requirements. Similar terms are defined

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[65] *Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 237, 27 S.Ct. 618, 51 L.Ed. 1038 (1907).

[66] *Cf. Massachusetts v, EPA,* 549 U.S. 497, 127 S.Ct. 1438 (2007)(recognizing that "in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted").

[67] 42 U.S.C. § 7416.

elsewhere in the Act, and there is no reason to presume they should have a different meaning here.[68]

Entrusting these variances solely to regulatory bodies sensibly recognizes their greater capacity to investigate and evaluate broad social concerns. For example, the 1990 amendments to the CAA directed the EPA Administrator to "conduct a comprehensive analysis of the impact of this Act on the health, economy, and environment of the United States," and further required the Administrator to consider the effects on "employment, productivity, cost of living, economic growth, and the overall economy of the United States."[69] Such a task is quintessentially *administrative* and lies far beyond the boundaries of the judicial process. Empowering state courts to vary regulatory emission standards would vest them with responsibilities they lack the resources to discharge. As the Supreme Court recognized in *AEP*, courts "lack the scientific, economic and technological resources" to deal with "issues of this order."[70] Since courts are "confined by a record comprising the evidence the parties present,"[71] they cannot broadly assess the impact of their rulings on the overall environment, much less consider the policy impact their decisions may have on complex issues of investment, employment and other concerns entrusted to regulatory authorities.[72] For those sound reasons, the CAA entrusts those powers only to the EPA and state regulatory agencies.

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[68] *See* 42 U.S.C. § 7604(f)(defining emission "standard" and "limitation" solely as statutory or regulatory requirements).

[69] *See id.*, at § 7612(a) and (c).

[70] *AEP*, 131 S.Ct. at 2539-40.

[71] *Id.*

[72] *Id.* at 2538-39 (CAA processes provide "informed assessment of competing interests," including "energy needs and the possibility of economic disruption.").

Although some may argue that the CAA's "citizen suit" provision preserves the right to pursue nuisance actions, that section does not control over broader preemptive language elsewhere in the Act. In the section that enables "citizen suits," the CAA provides that "nothing in *this section* shall restrict any right which any person may have under any statute or common law *to seek enforcement of any emission standard or limitation or to seek any other relief.*"[73] Nothing in this limited provision, however, purports to control the preemptive impact of *other* portions of the CAA. Indeed, in construing similar language regarding citizen suits under the CWA, the *Ouellette* Court observed that the clause "merely says that '[n]othing in his section' i.e., the citizen-suit provisions, shall affect an injured party's right to seek relief under state law; it does not purport to preclude preemption of state law by other provisions of the Act."[74]

By concentrating on the limited savings provisions of the CAA, both the *Bell* and *Freeman* courts erroneously took an improperly narrow perspective. In particular, they failed to conduct a correct "conflict preemption" analysis to determine whether state common law nuisance suits *actually conflict* with the CAA *as a whole* – and whether they "stand as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."[75] Instead, the courts used the savings clause, *standing alone*, to preclude "the ordinary working of conflict pre-emption principles" – an approach the Supreme Court has expressly disapproved.[76] Since even an *express* preemption clause in

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[73] 42 U.S.C. § 7604(e)(emphasis added).

[74] *Ouellette*, 479 U.S. at 493.

[75] *Geier v. Am. Honda Motor Co., Inc.*, 529 U.S. 861, 869 (2000); *Boggs v. Boggs,* 520 U.S. 833, 844 (1977).

[76] *Id.* at 871 ("Moreover, this Court has repeatedly 'decline[d] to give broad effect to saving clauses where doing so would upset the careful regulatory scheme established by federal law.'").

a federal statute does not necessarily foreclose the application of *implied* preemption,[77] the *Bell* and *Freeman* courts failed to apply an entire line of Supreme Court authority which requires a thorough and exacting consideration of the purposes and policies of the CAA – an analysis which, if undertaken, would inexorably lead to preemption of common law nuisance claims under state law.[78]

D. The Threat Posed by Nuisance Litigation to the Reliability of Permits Issued Under the CAA Should Be Removed.

The practical effects of failing to review these cases will impact the efficacy of the CAA significantly. Although the United States has made great progress in controlling and reducing air pollution, that progress is threatened by the nuisance litigation filed pursuant to state common law. Such litigation undermines the reliability of permits issued under the CAA to control air pollution and substitutes the judgments of state courts as the controlling authority – rather than the considered decisions of federal and state agencies to which Congress explicitly granted approval, implementation, and oversight, of air pollution standards and controls.

The history of environmental regulation reflects that "[e]conomic incentives have assumed a prominent position among the tools for environmental management," and "[n]owhere is this role more explicit than in the 1990 Clean Air Act Amendments."[79]

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[77] *Id*, at 869.

[78] *Id.* at 870 (concluding that "the rules of law that judges and juries create or apply in such suits may themselves similarly create uncertainty and even conflict, say, when different juries in different States reach different decisions on similar facts.").

[79] *See* Robert C. Anderson and Andrew Q. Lohof, *The United States Experience with Economic Incentives in Environmental Pollution Control Policy* (Env. L. Inst. 1997).

Those amendments authorized the EPA's permitting programs by which the agency provides specific standards governing air pollution within the regulated community.

The EPA's permitting system reflects a maturing process influenced by the increasing costs of pollution control. In that environment, standards for evaluating performance in pollution prevention" have played a more important role.[80] As Dean Anderson explained:

> When large reductions in pollution are easy, everyone can afford to be lenient about how a baseline is measured or how different methods of pollution are compared. As the easy reductions play out, that leniency fades. *As competition heats up, the certainty, predictability, and evenhandedness of pollution reduction requirements become centrally important.*[81]

Since failing to prevent pollution and voluntary industry collaboration were not viewed as acceptable options, the "last hope" for the "future of pollution prevention" was a "level playing field among companies undertaking (or failing to undertake) pollution prevention."[82] Since this option is "indispensable" to effective pollution control, the government recognized that its role was "to provide that level field."[83]

Congress acted to establish the "level playing field" with the 1990 amendments to the CAA, which specifically incorporated pollution prevention into the fabric of EPA operations. Shortly thereafter, EPA began "busily incorporating pollution prevention into

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[80] Frederick R. Anderson, *From Voluntary to Regulatory Pollution Prevention*, THE GREENING OF INDUSTRIAL ECOSYSTEMS, 98, 102 (Nat'l Academy Press, 1994).

[81] *Id.* (emphasis added).

[82] *Id.* at 103.

[83] *Id.* at 103.

the regulatory process and into targeted Clean Air Act regulations."[84] Because the EPA was charged by law to review its regulations to determine their impacts on reducing pollution at its sources, the agency created a Regulatory Targeting Project that covered rulemaking for all media affected by 17 major industries. Under this broad program, EPA required rules and permits to contain pollution reduction measures whenever possible.[85]

As a result of these efforts, pollution control became the basis for regulatory standard setting throughout the agency's operations, including permitting and enforcement.[86] Permitting and enforcement placed the agency into a position of considerable bargaining power, and incorporating pollution control into those programs was "clearly an effective means for EPA to mandate particular pollution prevention methods or standards."[87]

Since their authorization in 1990, permits issued pursuant to the CAA have remained one of the EPA's most important tools for air pollution control. Simultaneously, they have also served as trustworthy guideposts for regulated parties in the planning and execution of business operations. The reliability, predictability, certainty and finality of CAA permits provide the stability needed for businesses to make investments that improve and expand their facilities and empower the development and improvement of their products. By providing clear regulatory standards to guide the regulated community's conduct, strong incentives to conform to those standards, and a secure

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[84] *Id.* at 105.

[85] *Id.*

[86] *Id.* at 106.

[87] *Id.*

permitted environment within which businesses conduct their operations, EPA has made great strides to reduce and control air pollution.[88]

Nuisance litigation threatens this progress by undermining one of the CAA's most important methods of pollution control, namely, the permits issued pursuant to the CAA's authority. These permits specify clear standards that guarantee certainty, predictability, and evenhandedness to the regulated community. They are an essential part of the CAA's system by which the federal and state governments control air pollution. Once permits are issued, they provide sufficient regulatory certainty and finality for industries to make the necessary capital investments to ensure compliance without sacrificing competitiveness.

In this way, the CAA's regulatory and permitting process provide an "informed assessment of competing interests" – an assessment that is "not limited to environmental benefits," but which also considers a broad array of other factors, including "our nation's energy needs and the possibility of economic disruption."[89] For example, the Act expressly directs EPA to consider the economic impact of its actions,[90] as well as the employment effects of the administration or enforcement of the Act,[91] and even provides a mechanism for employees and employee representatives to request an investigation of

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[88] *See generally* EPA, *The Clean Air Act – Highlights of the First 40 Years* (September 2010), *available at* http://epa.gov/oar/caa/Clean_Air_Act_40th_Highlights.pdf (last visited March 12, 2014); EPA, *The Clean Air Act: Highlights of the 1990 Amendments*, available at http://www.epa.gov/air/caa/pdfs/CAA_1990_amendments.pdf (last visited March 12, 2014); Remarks of Lisa P. Jackson, former EPA Administrator, on the 40th Anniversary of the Clean Air Act, http://yosemite.epa.gov/opa/admpress.nsf/12a744ff56dbff8585257590004750b6/7769a6b1f0a5bc9a8525779e005ade13!OpenDocument (last visited March 12, 2014).

[89] *See AEP,* 131 S. Ct. 2527, 2538-2539.

[90] *See* 42 U.S.C. § 7617.

[91] *See id.* at § 7621.

employment impacts.[92] The CAA's program creates a level playing field for industry that ensures that members of the regulated community are regulated similarly, thereby precluding any particular member from enjoying an unreasonable competitive advantage. The end results of this process are permits that provide definitive pollution control requirements that can be relied upon for future business planning and operations.

By contrast, common law lawsuits proceed from a narrower perspective and entail unpredictable economic results. Courts presiding over such controversies lack the authority, tools, resources and expertise to ensure that their judgments maintain the level playing field so painstakingly created by the CAA's regulatory process. Moreover, unlike regulatory agencies, which apply clear standards to derive specific requirements for compliance, nuisance lawsuits employ liability standards which are notoriously vague. There are no procedures to coordinate nuisance proceedings pending in different states – and many states lack procedural rules to coordinate similar proceedings within the same state. As a result, sources could be governed by a plethora of conflicting directives issued by state courts in multiple jurisdictions – or even by edicts issued by multiple state courts within the same state.

The Iowa Supreme Court's decision in *Freeman* is a prime example of how state nuisance litigation can upset the carefully considered policies on the CAA. In that case, the plaintiffs seek an injunction ordering the replacement of "grandfathered" equipment permitted under the facilities' permit. In the CAA, Congress provided a program to address the timing of such upgrades.[93] To accommodate economic concerns,[94] the

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[92] *See id.* at § 7621(b).

[93] *See* 42 U.S.C. §§ 7475, 7502.

program required upgrades only when facilities modify, replace or construct new emission sources or when the facilities emissions result in the local area's failure to attain compliance.[95]

If courts are permitted to vary this Congressional decision through nuisance lawsuits, they will plainly conflict with the legislative prerogative entrusted to Congress by the CAA. Such infringements by private litigation are inconsistent with Supreme Court precedent.[96] In *TVA*, Judge Wilkinson summarized why the federal permitting system has primacy in such matters:

> It would be odd, to say the least, for specific state laws and regulations to expressly permit power plant to operate and then have a generic statute countermand those permissions on public nuisance grounds. While North Carolina points out that an activity need not be illegal to be a nuisance, that is not the situation before us. *There is a distinction between an activity that is merely not illegal versus one that is explicitly granted a permit to operate in a particular fashion.*[97]

Failure to protect the interests safeguarded by the CAA will allow individual courts to adjust or ignore the terms of carefully crafted legislation and permits on an *ad hoc* basis – with no perspective other than the limited records supplied by private litigants. Such a practice necessarily "interferes with the methods" by which the CAA "was designed to

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[94] *See National Parks & Conservation Ass'n v. Tenn. Valley Auth.*, 502 F.3d 1316, 1319 (11th Cir. 2007)("This system is intended to achieve environmental controls without unduly hampering economic growth.").

[95] *See* 42 U.S.C. §§ 7475, 7502.

[96] *See e.g., Geier,* 529 U.S. at 881.

[97] *TVA*, 615 F.3d at 309 (emphasis added).

reach [its] goal" and unquestionably "has the potential "to undermine the regulatory structure."[98]

No consistent or informed environmental policies can emerge from such disparate proceedings. Since the evidence, rulings, and outcomes can vary according to the unique record of each case, there is no guarantee of consistent results even between similar facilities. Until and unless the Supreme Court decides to review this issue, the CAA's carefully designed permitting system will remain endangered by the vagaries of state common law.

CONCLUSION

The current "Circuit by Circuit" and "state by state" approach to the question of preemption precludes any uniform standards for environmental compliance and enforcement and also vitiates any reliable basis for capital investment, expanded operations and workforce stability. Since the CAA was enacted to promote all of those goals – as well as to promote jobs and a healthy economy – delaying review prolongs the uncertainty and intensifies the dilemma facing not only the courts, but also the regulated community. Under these circumstances, United States Supreme Court review still presents the best opportunity to resolve this difficult question.

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[98] *See International Paper Co. v. Ouellette*, 497 U.S. 481, 494, 497, 107 S. Ct. 805, 93 L. Ed. 2d 883 (1987).

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Publications

- Texas Railroad Commission Heightens Scrutiny of Injection Wells Linked to Seismic Activity (May 13, 2015)
- Key Texas Environmental Legislation Highlights (June 26, 2013)
- New Air Emissions Standards for the Oil and Gas Industry (April 24, 2012)
- "Carbon Storage: Texas Stakes its Claim," ABA's *Natural Resources & Environment* (Fall 2010)
- "Emerging Environmental Regimes for Contaminated Land in Latin America," *International Environment Reporter*, BNA Inc. (October 2008)
- "Growing Attention to Product Stewardship Initiatives Seen in Latin America," *International Environment Reporter*, BNA Inc. (August 2006)
- "A Look Back: Twenty Years of the Clean Water Act's Whole Effluent Toxicity Biomonitoring Program," *Eastern Water Law and Policy Reporter* (June 2006)

Events

- 2015 State Bar of Texas – 27th Annual Texas Environmental Superconference (August 7, 2015)
- Legislative/Regulatory Program (moderator), Texas Water 2015 (April 15, 2015)
- International Law Presentation, The International Law Section, State Bar of Texas and The University of Texas School of Law Career Services Office (March 12, 2015)
- 10th Annual Texas LEAD Professional Development Conference (August 24, 2012)

- "Product Stewardship," 23rd Annual Texas Environmental Superconference (August 2011)
- "Regional Review: E-Waste Take-Back Initiatives in Latin America," TechAmerica, 9th Annual International Environmental Compliance, Enforcement and Best Practices Conference (April 2011)
- "Global Environmental Trends," NAEM Global EHS Conference (June 2010)

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I. Introduction.

In the wake of high-profile accidents, catastrophic spills and releases, companies that produce, refine, process, handle or transport hazardous materials or who maintain refineries or chemical complexes that could be impacted by an accident, have had to increase their focus on how to anticipate, handle and respond to such catastrophes. If they fail to plan -- or are negligent in their failure to adequately plan -- allegations of liability may implicate or expose high-level management, officers and directors. Companies must ask the question now -- before such an incident occurs -- whether they are prepared to mobilize and address large-scale emergencies and the attendant fallout.

Boards of Directors and upper management are specifically asking corporate officers and management what they are doing to protect the company, the customers and the Board of Directors themselves from liabilities associated with a catastrophic spill or release. They are asking the question "are we prepared?"

How can company officials answer the question that their Boards are asking? What can they do to prepare in advance and put steps into place to facilitate handling of catastrophes and minimize risk to the extent possible? How can they train or benchmark the preparedness of their companies, employees and processes to respond to a high-profile accident -- before it even happens? How do they know whether or not they are prepared?

Companies **can** take steps in advance to answer these questions and prepare for large-scale emergency response activities through a variety of techniques designed to benchmark their current state of readiness, evaluate responsiveness in the form of a real-time exercise, and allow review and feedback to identify areas that were successful and potential "weak links" and areas that need improvement, with the ultimate benchmark of "lessons learned" and "weaknesses addressed" made available before an event occurs. An overview of emergency response policies, emergency response plans, and company-wide procedures coupled with real-time response simulations, table-top exercises and drills, and other response techniques to address crisis-level accidents, releases and incidents can help answer the question "are we ready" and "if not, what needs to be done to get ready." Real life simulations, exercises and drills not only test emergency responder issues and on-scene response, but test the company-wide response and assess preparedness in dealing with the news media, crisis management, social media, environmental issues, government relations, communications, litigation, claims and other company-wide impacts.

The ability to show diligence and forethought, and taking proactive steps to train and prepare for emergencies, can provide a response to claims of negligence, negligent failure to plan or negligent management/training, inattention, and failure to plan. Conducting emergency

response simulations, drills and exercises provide a way to answer a Board of Director's question -- are we prepared?

II. Testing emergency preparedness *before* an accident occurs.

One of the most effective ways to perform a comprehensive review of a company's emergency preparedness is to test its emergency preparedness **before** an emergency occurs. With the information learned and feedback from a comprehensive advance review, companies can refine, review and retrain in peacetime -- not during or after a catastrophe. The steps that can yield the information to assess preparedness can be generally summarized to include:

- **Evaluate** policies and plans.
- **Test** the corporate response and implementation of plans.
- **Review** the response and identify areas needing improvement.
- **Retrain**, refresh and update as a result of feedback from training

This can be done by conducting a simulation, drill or exercise -- as well as a plan or tabletop review -- to generate information regarding the strengths and weaknesses of the organization.

A. Real-Time Simulations.

Real-time full-scale simulations test across-the-board corporate systems in the face of a catastrophic incident. Some are structured as planned exercises known about in advance; others are set for random times with little warning to the participants. In a real-time simulation, the types of internal systems that can be tested include the on-scene emergency response, government relations response, media responses, implementability of corporate policies and procedures, claims and operating department response, as well as internal corporate communications, customer relations and social media considerations, among others.

B. Table-top exercises.

If a real-time simulation is not possible or desired for various reasons, a table-top exercise can be designed to test systems in a more controlled environment that can be structured in increments or focused on a specific media. Some table-top exercises are done in a group environment with role-playing, fact patterns, hypotheticals and the like that are walked through, talked through and discussed to identify areas where additional training may be necessary or where knowledge is lacking in critical areas. Others can be focused on a particular group, locale

or specific media -- rather than a company-wide exercise -- to generate information and data on particular groups, personnel or disciplines that would allow analysis and feedback based upon the responses, input or lack thereof to the exercises being undertaken.

C. Plan, procedure and policy review.

A related component to what a company's response actually is, is what the company has already said it should be. Accordingly, a part of any review of response capability should also include the evaluation of the plans, procedures and policies that the company has already put into place to determine if they were followed, where they might be deficient and to evaluate their effectiveness.

D. Evaluate, Test, Review, and Retrain.

1. Evaluate.

Many companies have already put together company policies, emergency response plans and mission statements. Some are hundreds of pages long and fill up volumes of notebooks. Some sit in the corporate library; not everyone who may be called upon to implement them may even know where they are. Some companies put all or part of their policies, plans and mission statements on their web sites. Emergency response plans may, or may not, be easily accessed in the event of an actual emergency by the persons who need them most. Some plans may be too cumbersome to be useful or may not have been updated as necessary.

A key component to evaluating and benchmarking preparedness and response is to include a review all corporate policies, plans and mission statements that could apply in an emergency situation. That is because regulators and litigants will be doing the same thing -- only they will do it **after** an incident has occurred and when it is too late to change, update or conform those documents as may have been necessary. A key issue is whether corporate plans and policies mesh with the company's mission statement and/or whether various plans and policies are even consistent with each other -- issues that can be used in litigation and regulatory investigations that may follow an incident.

2. Test.

As noted above, accident drills or a variety of table top exercises can be used to simulate or test aspects of a significant incident. They are designed to generate inquiries, identify issues, and present stimuli that a Company would expect to respond to in a significant incident. In addition to emergency responders, such exercises can test responses from company-wide groups who may also be involved in aspects of a response, such as the Law Department, Government Relations, Corporate Communications, Operations and Responders, among others.

Types of testing mechanisms may range in scope, magnitude and focus, and can be designed to include:

- Notification exercises: for example, a check of contact numbers and an exercise to determine whether key players can be reached quickly; if not, to design a plan to account for the absence of decision makers in a crisis.

- Walk-through: for example, use of a potential scenario to ask a series of questions of your team and determine whether their response is appropriate in the circumstance and in light of company procedures;

- Tabletop: for example, a working session or run-through of a potential scenario and test an aspect of the plan or response (i.e., developing press statements, responding to social media).

- Simulation exercise: for example, testing by using an exercise control team to provide "inputs" via phone calls, emails, press releases, news reports, social media postings, governmental inquiries, and other stimuli in real-time for a specified duration that is long enough to test performance, response time, communication, stamina and other aspects of a response to a catastrophic incident.

Accidents do not happen with plenty of warning, during working hours or when everyone is available. Neither should training exercises that are designed as no-notice or controlled notice exercises meant to capture feedback in real time. For maximum benefit, they can be scheduled at inconvenient or random times with little or no notice, or when key players are absent, to provide realistic input of corporate response and preparedness. Real-time simulations also test endurance and stamina, in addition to substantive response criteria, testing a company's true capabilities and its real ability to respond.

3. Review.

After accident drills or table top exercises, data and conclusions should be compiled and time allotted for an in-depth review and discussion of issues identified and lessons learned. The debrief can address opportunities for improvement where necessary. Results of the review can also be used to demonstrate training/readiness to management, as well as to provide a basis to demonstrate the company's proactive approach to negate later potential external allegations of negligence or negligent management/training. Accident drills show internal management and the Board of Directors that the company is proactive, preparing and training.

4. Retrain.

The findings from a review, debrief and lessons learned can focus a company on the areas where their resources should be focused on retraining. Where areas for improvement are identified, those areas can be scheduled for retraining, targeted for improvement and revisited periodically to ensure training has accomplished the desired goals. In some areas, refresher training can be scheduled on a periodic basis. In the face of future litigation and investigations associated with a catastrophic incident, company records showing that the personnel, systems, processes and policies were evaluated, tested, reviewed and that retraining and refresher training was implemented as a result can go a long way to rebut more serious allegations of widespread corporate negligence when accidents occur.

III. Emerging Issues Regarding Media and Social Media.

Increased awareness, training and education on emerging issues regarding media and communications responses have also become part of the consideration of preparedness for emergency response, particularly because of the increasing use of electronic and social media (Twitter, YouTube) at catastrophic scenes. Awareness of the legal and policy issues associated with such instantaneous information streams available to the public of sensitive and graphic events is critical in emergency response and crisis management.

For these reasons, social media and corporate communications are issues that have taken on a higher importance and need to be addressed in advance of an incident, as part of any media or communications plan to be implemented. Because of the pervasive nature of social media, companies should consider particular, focused training on those types of issues as part of an emergency response plan or drill to test preparedness.

Why is social media a major concern in emergency response? Because it is how people find out information today. People on Facebook and Twitter may immediately know more about a company's crisis than company officials. A tweet from a survivor or eyewitness can reach tens of thousands of users around the work in minutes.

This is an issue for corporations because the public expects **companies** to keep them informed, but they may get more information from other sources than the company involved which can create negative reactions and perceptions. News media may also encourage the public flow of information (which may be ultimately be sought to be used as evidence) by soliciting information from the public and asking them to send or text their pictures and videos to the news media for even wider, immediate distribution. Accordingly, companies need to update their current crisis communications plans to address social media. If a company does not have a formal crisis communication/media plan, it should devise one that can take into account instantaneous information -- from outside its own organization as well as inside.

A. Communications/Media Plan.

A review of how a company's media plan can interface proactively with the public is a key component of preparedness. Components of a media plan can address issues such as:

- Media statements
- The company's face to the public – who will this be?
- Fact Sheets
- Talking Points
- Web Site
- Community Action
- Compensation/Claims
- The Company's message – what is it?

A company's media and communications plans should also evaluate whether there is consistent messaging among:

- The Company website
- Employee intranet
- Individual or group briefings
- Customer communications
- Communications from company representatives (law firms/insurers)
- Social media platforms (Company Facebook or Twitter accounts)

B. Develop Your Social Media Policy in Peacetime.

The time to develop and test your media and social media policy is when there is no crisis at hand. The advantage of having time without pressure to evaluate and plan ahead to address

the new issues arising through the rapid spread of information and misinformation through social media is that a well-thought-out plan can be devised and personnel can be trained to expect and address issues that may arise. Types of items that can be addressed to prepare for social media issues include:

- Develop a "dark" website during peacetime, to be activated during an accident and refer to it in all press statements so people will know where to go for information.
- To tweet or not to tweet. Figure it out ahead of time.
- Develop basic talking points about what you already know about your company – this will save time in an emergency situation and avoid drafting from scratch.
- Develop a template for press releases/fact sheets.
- Know your social media platforms.
- Audit all social media channels already used by your organization, and include social media channel monitoring as part of your conventional media program.
- Social media commentary is your first jury research pool, so compile and follow it.

C. Train everyone likely to be involved in incident response in the media plan.

Given the nature of large-scale incidents, the media relations group will not be the only company personnel that need to understand how to implement and participate in the media plan. Testing and benchmarking how other internal groups handle potential media exposure should include a larger group of corporate personnel who may be exposed to these issues in catastrophic accident. This can include external company teams, such as physical incident response (consultants/responders or field personnel), as well as internal company departments such as the Law Department, Government Relations, Claims, Operations, Risk Management, and others. In addition to being trained in the company's policies and procedures regarding media issues, training can assist the various and sometimes geographically separated groups understand their roles and interrelationships in a crisis.

Benchmarking and testing roles, relationships and communications – particularly with regard to public statements/actions – are important because the potential types of roles of various groups often inter-relate and can sometimes create conflicts with inconsistent responses or messaging. For example, in a high-profile crisis, various departments may have roles which cross into other areas – and most all of which will have potential interaction/impacts with media, such as:

Law Department.

- Legal advice (assess legal issues and preserve privilege over investigation and response)
- Investigation
- Evidence preservation
- Hold Orders
- Defense (TRO, injunctions)
- Chain of command issues
- Interface with:
  - Regulators
  - Government (local, state and federal)
  - Claims
  - Operations
  - Emergency Response
  - Media

Corporate Communications/Governmental Relations.

- Response to immediate demands for information from public, Governments, regulators
- Implement media/communications plan
- Hotline/website information coordination
- Identify who speaks for the Company. Will CEO/President comment?
- Address potential restrictions on Company's ability to release information (regulators' instructions or command over incident)
- Internal, external and customer communications
- Coordination with Law and other departments for press releases/media statements and briefings
- Social media issues and immediate demands for information/statements/Claims/Loss Prevention

Risk Management/Claims.

- Insurance notifications/evaluation of loss
- Establishment of claims center or place where people can seek redress
- Hotline and website information
- Business Interruption issues
- Customer Relations issues, affected local businesses, potential evacuees

- If dollars need to be committed to address incident, what is the process? How quickly can that be accomplished?
- Coordination with carriers/SIR issues and determinations

Operations.

- Coordinate with Law
- Coordinate investigations with Team
- Field response/mobilization
- Retention of emergency responders/consultants
- Coordinate with media and know process for referring press inquiries
- Ensure ground staff in the field, including contractors, are briefed and managed to coordinate and comply with plans and processes.

Training the various groups who have a role in addressing a catastrophic incident in the media plan can help employees be ready and avoid having them caught unaware of the appropriate response. Training can educate them not to "speculate" about cause of an incident and to ensure they know the communication protocols. Training them in the company's code of ethics, policies, procedures, as well as proper use (or not) of email communications in a crisis situation builds the initial framework for a more coordinated and appropriate response to a crisis. Formal training, and periodic refresher training, can help employees remember the protocols when an emergency arises.

D. Does Your Company have an employee social media policy?

Many companies have implemented a company-wide social media policy for their employees. Some of the reasons that an employee social media policy may be appropriate is the recognition that every employee in an organization is potentially a spokesperson. Employees may identify their connection to their company employer on their LinkedIn profile or Facebook page, enabling reporters and journalists to "friend" them in times of crisis.

Considerations for an Employee Social Media Policy include issues associated with:

- Guidelines regarding whether employees can access social media channels during working hours

- Prohibitions on posting photographs or video on company premises or in course of employment
- Prohibition on posting comments on social media sites relating to their work for the company or senior executives, supervisors or colleagues

- Reminders/reinforcement to all employees not to post information or engage in on-line discussions about an event.

IV. Conclusion.

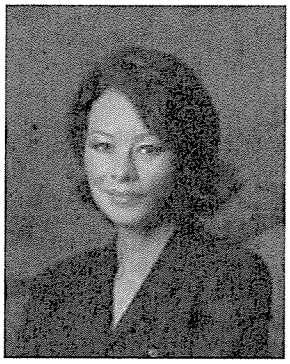
Companies do not have to wait until an emergency occurs to find out whether or not they and their corporate systems are prepared to handle a catastrophic incident. Testing a company's plans, systems, response and internal coordination in advance through tailored real-time simulations, drills, table-top exercises that utilize a variety of techniques can pinpoint areas that need improvement, personnel who need training and processes and protocols that may not actually be fully implementable or optimal. Testing allows the opportunity for thoughtful review and refinement of a company's response, before an accident happens. The documentability of efforts to prepare and improve can provide a potential line of defense against litigation issues, investigations and potential liability that can reverberate through all levels of the company, including allegations that corporate officials failed to plan for emergencies.

A proactive approach to evaluating responses, policies and plans, testing the corporate response, reviewing the results and retraining, refreshing and updating can allow a company to take these steps during peacetime -- not during or after a catastrophe when it is too late. As has been aptly said, "failing to plan is planning to fail." Testing your company's readiness to meet an environmental disaster is planning to be ready.

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She is active in bar, law school and community activities promoting issues concerning the environment, minority advancement and gender equality issues, among others. Ms. Baker was featured on the cover of *Diversity & The Bar* magazine, a publication of the Minority Corporate Counsel Association, in connection with her work in the area of diversity. She is the 2008 recipient of the Ma'at Justice Award, awarded annually by the State Bar of Texas Women and the Law Section to an individual who has actively addressed the needs and issues of women in the legal profession and the community. Ms. Baker was also the 2006 award winner of the Texas Bar Foundation's Dan Rugeley Price Award presented to an outstanding practitioner dedicated to the bar and public. She has served as an Adjunct Professor of Environmental Law at both the University of Houston Law Center and the South Texas College of Law, and was co-founder and past Chair of the Houston Bar Association's Environmental Law Section. She was also a founder and Chair of the American Bar Association's national Environmental Law Group, supervising 10 environmental committees integrating issues of environmental law with real estate, landlord and tenant issues, due diligence, and merger and acquisition transactions. Ms. Baker was the 2008 Chair of the Houston Bar Foundation, the HBA's 501(c)(3) charitable foundation, and other bar appointments have included serving on the Board of Directors of the Asian American Bar Association, as Vice Chair of the State Bar of Texas Standing Committee on Women in the Profession, and Co-Chair of the Houston Bar Association's Gender Fairness Committee, among others. Prior to forming her firm, Ms. Baker headed the Environmental Law Practice group for the 120-lawyer firm of Mayor, Day, Caldwell & Keeton, L.L.P. for over a decade and also practiced environmental law in the D.C. and Houston offices of Fulbright & Jaworski, L.L.P. She is admitted to practice in both the District of Columbia and Texas.

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About Toby Baker



Along with his two fellow full-time commissioners, Baker establishes overall agency direction and policy, and makes final determinations on contested permitting and enforcement matters.

Baker also serves as Governor Perry's appointee to the Gulf Coast Ecosystem Restoration Council and the Western States Water Council, represents Texas on the Gulf of Mexico Alliance Management Team, and serves on the Coastal Land Advisory Board.

Prior to his appointment, Baker was a policy and budget advisor on energy, natural resources and agriculture issues for the Governor's Office, where he was also the liaison between the office and members of the Legislature, constituents, the Railroad Commission of Texas, the TCEQ, the Texas Parks and Wildlife Department, the Texas Department of Agriculture, and the Texas Animal Health Commission. He is a past natural resource policy advisor to Sen. Craig Estes, and the former director and clerk of the Texas Senate Subcommittee on Agriculture, Rural Affairs and Coastal Resources.

Baker received a bachelor's degree from Texas A&M University, where he was a member of the Corps of Cadets, and a Master of Public Service and Administration from the Texas A&M George Bush School of Government and Public Service. He is also a graduate of the National Outdoor Leadership School and the Governor's Executive Development Program at the University of Texas LBJ School of Public Affairs

Carter Smith
Executive Director
Texas Parks and Wildlife Department

Carter Smith serves as the executive director of the Texas Parks and Wildlife Department (TPWD), a position he has held since January 2008.

A native of central Texas, Smith developed his passion for wildlife and the out of doors at a young age while roaming his family's farm and ranch land interests in Gonzales, Williamson, and Edwards Counties. He has a wildlife management degree from Texas Tech and a master's degree in conservation biology from Yale University. He began his professional career in 1992 as a management intern at TPWD, assisting in the Private Lands and Public Hunting programs. As a biologist, he has worked on a variety of research projects ranging from studying moose in the boreal forests of Saskatchewan to mule deer and pronghorn antelope in far west Texas to waterfowl in the Laguna Madre of Texas and Tamaulipas, Mexico.

He serves on a number of conservation-related boards of directors and advisory councils, including the Texas Land Trust Council, and the Katy Prairie Conservancy. He currently serves as past President of the Western Association of Fish and Wildlife Agencies, Chair of the Association of Fish and Wildlife Agencies, and as immediate past-Chair of the Southeastern Association of Fish and Wildlife Agencies. He is also a Professional member of the Boone & Crockett Club and a lifetime member of the Texas Bighorn Society and Dallas Safari Club. Smith was recently named an outstanding alumnus by Yale University and Texas Tech, and was honored by the Audubon Society with their Victor Emmanuel Conservation Award.

Prior to his selection as TPWD executive director, Smith was with The Nature Conservancy of Texas, serving as state director.

At Texas Parks and Wildlife Department, he is responsible for overseeing an agency of 3,100 professionals in 11 different divisions, including Wildlife, Law Enforcement, State Parks, Coastal Fisheries, and Inland Fisheries. Smith has been particularly active in the realms of private lands stewardship, coastal issues relating to the state's involvement with the Deepwater Horizon incident, children in nature initiatives, invasive species issues, and expanded outreach to the state's urban populace.

Carter and his wife, Stacy, and their son, Ryland, reside in Austin.

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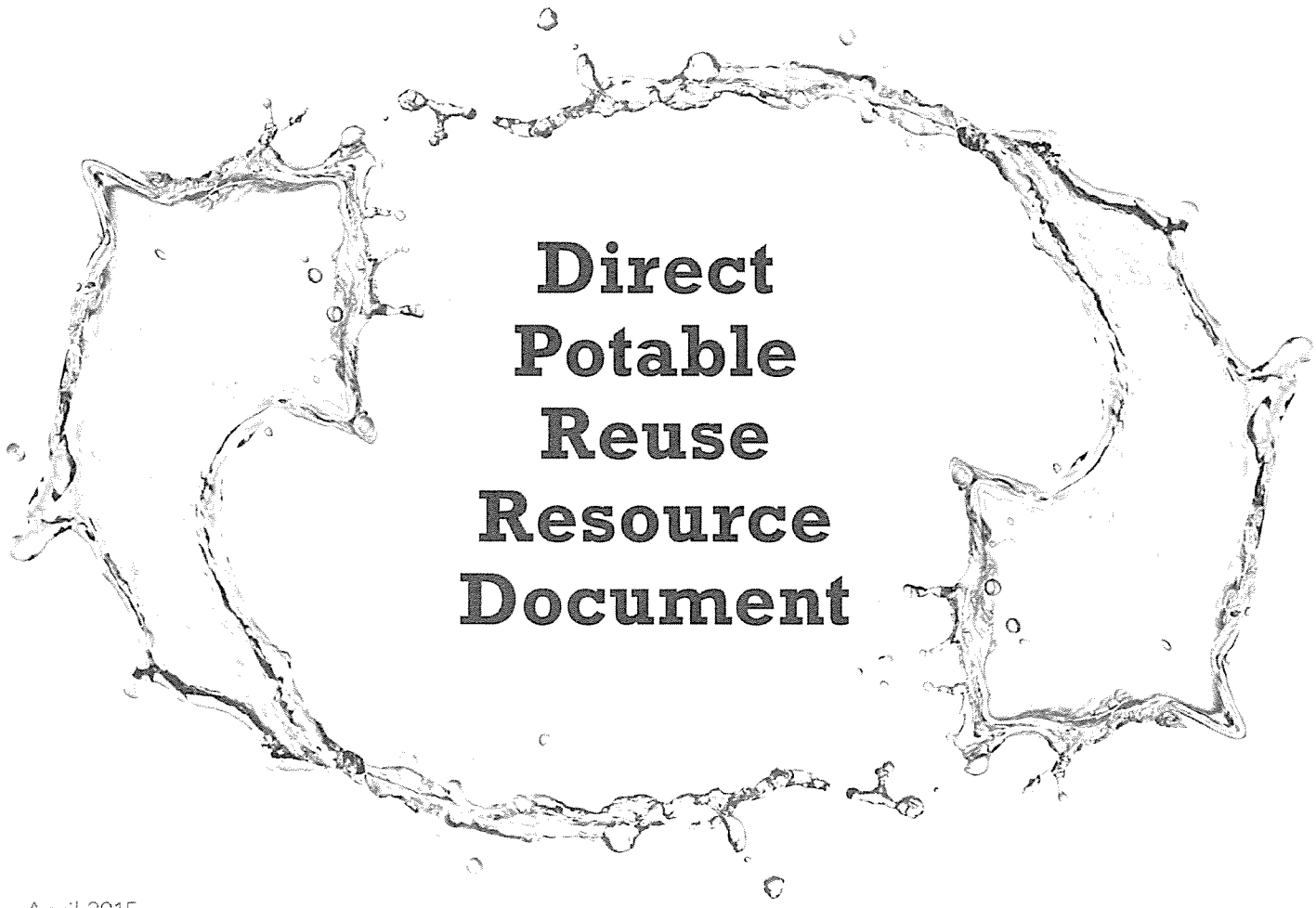
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Representative clients include refineries, petrochemical plants, onshore and offshore upstream oil and gas operators, midstream operators, publicly owned treatment works, mining, semiconductor manufacturers and electric utilities. Sara regularly tracks and speaks on state and federal regulatory developments that have potential to impact client operations.

Texas Water Development Board
1700 North Congress Avenue
Austin, Texas 78711

FINAL REPORT



Direct Potable Reuse Resource Document

April 2015

TBPE Firm Registration No. F-13
ALAN PLUMMER ASSOCIATES, INC.
ENVIRONMENTAL ENGINEERS AND SCIENTISTS

TWDB Contract No. 1248321508
Volume 1 of 2

In conjunction with:

EOA, Inc. • Lloyd Gosselink Attorneys at Law • Nellor Environmental Associates, Inc. • Separation Processes, Inc. • Soller Environmental, LLC • Trussell Technologies, Inc. • Dr. Jörg Drewes, Technical University of Munich • Dr. Steven Duranceau, University of Central Florida • Dr. Desmond Lawler, University of Texas at Austin • Dr. Shane Snyder, University of Arizona • Dr. George Tchobanoglous, University of California at Davis

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Glossary



8 Regulatory and Legal Considerations for Direct Potable Reuse in Texas

In This Chapter

- Existing Direct Potable Reuse regulations or guidelines
- Current regulatory framework for Direct Potable Reuse in Texas
- Recommended process for seeking regulatory approval for Direct Potable Reuse in Texas

Road Map

1. Introduction
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3. Water Quality Performance Targets for Direct Potable Reuse
4. Enhanced Source Control for Direct Potable Reuse
5. Treatment Strategies for Direct Potable Reuse
6. Chemical Quantitative Relative Risk Assessment Examples
7. Pilot- and Bench-Scale Testing for Direct Potable Reuse Treatment Studies
8. **Regulatory and Legal Considerations for Direct Potable Reuse in Texas**
9. Public Outreach Programs for Potable Reuse Projects



8.1 Existing Direct Potable Reuse Regulations and Guidelines

Currently, water reuse in the United States is governed by individual state regulations, as there are no national regulations in place that directly address water reuse. Direct potable reuse (DPR) is not defined in statute or rule, either at the federal or State level in Texas.[40]

Difference between regulations and guidelines

- *Regulations (or criteria) refer to enforceable rules adopted by federal agencies or states*
- *Guidelines (or guidance) refer to non-enforceable advice or recommended actions by federal agencies or states*

The U.S. Environmental Protection Agency (EPA) published water reuse guidelines in 1992, 2004 and 2012 (EPA, 2012). The *EPA 2012 Guidelines* include a definition of DPR and a brief discussion of planning considerations and research needs. The document is intended to be solely informational and does not impose legally-binding requirements on the EPA, states, local or tribal governments, or members of the public. Other than this brief reference in the EPA guidelines, no other federal or state guidelines specifically addressing DPR have yet been published. The WateReuse Association, in cooperation with the National Water Research Institute, Water Environment Federation and American Water Works Association, is currently funding a project to develop a framework by a National Water Research Institute expert panel. The framework will be available in 2015.

EPA 2012 Guidelines for Water Reuse

The EPA Guidelines for Water Reuse is a comprehensive reference resource addressing many types and aspects of water reuse.

To download the guidelines, visit:

http://nepis.epa.gov/Adobe/PDF/P100FS7K.pdf

[40] The State of California has defined DPR in statute and is currently evaluating the feasibility of developing DPR regulations.

8.2 Current Regulatory Framework for Direct Potable Reuse in Texas

As discussed in earlier chapters, for the purpose of this document DPR is defined as "the introduction of reclaimed water either directly into the potable water system downstream of a water treatment plant or into the raw water supply immediately upstream of a water treatment plant". By definition, it is assumed that the reclaimed water will not be discharged to waters of the State prior to use and, therefore, will not be subject to requirements of the Clean Water Act (CWA)[41]. However, it should be noted that for indirect potable reuse (IPR) applications where there is a discharge to a water course and subsequent diversion of this water for potable water supply immediately downstream, many of the technical principles discussed in this document would be relevant. Although not discussed in detail here, the CWA (addressing discharge permitting), as well as Chapter 11 of the Texas Water Code (addressing water rights), would also apply in these cases.

8.2.1 Safe Drinking Water Act Provisions

All potable reuse projects must meet drinking water standards adopted under the Safe Drinking Water Act (SDWA). The SDWA includes provisions to evaluate a source water prior to authorizing it for treatment and potable consumption. Specifically, Section 1435 of the SDWA includes the following language:

> *The review under this section shall also include a review of the methods and means by which alternative supplies of drinking water could be provided in the event of the destruction, impairment or contamination of public water systems.*

The EPA, and subsequently the Texas Commission on Environmental Quality (TCEQ), relies on the above language as the authorization to regulate each new source of water. Each new source that will be treated and ultimately consumed as potable water must be evaluated and authorized pursuant to the SDWA. Texas has explicitly included the requirements of the SDWA in Sections 341.031-0315 of the Texas Health and Safety Code (THSC). The THSC is the statutory basis for TCEQ's authority to review and approve any new sources of water prior to it being used for potable consumption. Given that DPR is a nontraditional source of water, the review and approval process involves a number of regulatory provisions promulgated by TCEQ.

[41] Public water systems interested in a DPR project are encouraged to speak with staff in TCEQ's Water Availability Division to confirm that the reclaimed water to be used as a source is not subject to any water rights restrictions.



Chapter 290 of Title 30 of the Texas Administrative Code (TAC) provides the regulatory framework for TCEQ to implement the SDWA and THSC provisions applicable to DPR. Specifically, Section 290.41(e)(1) includes the following language:

For More Information

All TCEQ rules can be viewed or downloaded from the TCEQ's website at:

http://www.tceq.state.tx.us/rules/current.html

> *To determine the degree of pollution from all sources within the watershed, an evaluation shall be made of the surface water source in the area of diversion and its tributary streams. The area where surface water sources are diverted for drinking water use shall be evaluated and protected from sources of contamination.*

While the origin of the reclaimed water may, or may not, have been surface water, because the DPR source is akin to surface water (and clearly not produced from a groundwater well) it is evaluated for suitability as a source water. Most notably, it is evaluated because, as noted in TAC Section 290.41(e)(1)(A), it is "...subject to continuous contamination by municipal ... effluent." The entirety of the "raw water reaching the treatment plant," absent some blending with another source, is treated effluent.

The provisions of TAC Section 290.41(e) further go on to require additional data on a potential source water. Texas Administrative Code Section 290.41(e)(1)(F) provides for the following:

> *Before approval of a new surface water source, the system shall provide the executive director with information regarding specific water quality parameters of the potential source water. These parameters are pH, total coliform, Escherichia coli, turbidity, alkalinity, hardness, bromide, total organic carbon, temperature, color, taste and odor, regulated volatile organic compounds, regulated synthetic organic compounds, regulated inorganic compounds, and possible sources of contamination. If data on the incidence of Giardia cysts and Cryptosporidium oocysts has been collected, the information shall be provided to the executive director. This data shall be provided to the executive director as part of the approval process for a new surface water source.*

Therefore, a detailed source water quality assessment must be provided and approved by TCEQ prior to implementing a DPR project.

TCEQ relies on at least two other regulatory provisions to perform its source water and treatability review. Texas Administrative Code Sections 290.39(l) and 290.42(g) involve exceptions to the limited types of treatment technology approved in rule, and the use of what is considered innovative technology to treat water for potable consumption; TAC Section 290.42(g) includes the following language:



> *Innovative/alternate treatment processes will be considered on an individual basis, in accordance with §290.39(l) of this title.*

Texas Administrative Code Section 290.39(l) states:

> *Requests for exceptions to one or more of the requirements in this subchapter shall be considered on an individual basis. Any water system which requests an exception must demonstrate to the satisfaction of the executive director that the exception will not compromise the public health or result in a degradation of service or water quality.*

Because a DPR project will require advanced treatment, the conventional water treatment provisions of TAC Chapter 290, Subchapter D are not sufficient. TCEQ must evaluate each DPR project on a case-by-case basis, and evaluate the types of treatment technology needed to ensure there are no "adverse effects" pursuant to TAC Section 290.41(e)(1)(F) as noted above.

At this time, there are no additional adopted regulations regarding the process for review of a DPR project as related to the SDWA. However, TCEQ does have a fairly extensive set of documents, including final approval letters for at least three DPR projects at this time[42]. The final approval letters can be used as some form of guidance as to how TCEQ implements TAC Sections 290.39(l) and 290.42(g) for DPR projects. These letters can be obtained from the TCEQ through the public information request process.

8.2.2 Authorization Under 30 Texas Administrative Code Chapter 210

One additional provision of a DPR project that should be considered is whether the project requires approval pursuant to 30 TAC Chapter 210. If there is no ultimate disposal of the reclaimed water, pursuant to Section 26 of the Texas Water Code, then arguably it is being repurposed and reused, which is the regulatory intent of Chapter 210. Texas Administrative Code Section 210.2(a) and 210.5(a) state as follows:

> *210.2(a) The purpose of this chapter is to establish general requirements, quality criteria, design, and operational requirements for the beneficial use of reclaimed water which may be substituted for potable water and/or raw water. As defined and specified in this chapter, the requirements must be met by producers, providers, and/or users of reclaimed water. Specific use categories are defined with corresponding reclaimed water quality requirements. These criteria are intended to allow the safe utilization of reclaimed water for conservation of surface and ground water; to ensure the protection of public*

[42] Colorado River Municipal Water District Project at Big Spring, the City of Wichita Falls Project, and the proposed City of Brownwood Project.

health; to protect ground and surface waters; and to help ensure an adequate supply of water resources for present and future needs.

210.5(a) Prior to discharging any reclaimed water to the waters in the state, the provider or user shall obtain a permit from the commission in accordance with the requirements of Chapter 305 of this title (relating to Consolidated Permits) except as provided for by §210.22(e) of this title (relating to General Requirements).

While it is clear that reclaimed water is not to be utilized for human consumption pursuant to Section 210.22, there is a means for authorizing an alternative system. Texas Administrative Code Sections 210.42 and 210.43 state as follows:

210.42(a) If a reclaimed water provider or user proposes to design, construct, or operate a reclaimed water system or to utilize reclaimed water in a manner other than authorized in these rules, the provider or user shall file a request with the executive director, in addition to the notification filed pursuant to §210.4 of this title (relating to Notification), identifying the alternative proposal and requesting approval by the executive director.

210.42(b) The request shall be in writing and shall include information necessary or useful in assisting the executive director in acting on the request for approval of the alternate reclaimed water proposal.

210.43 The executive director shall review an alternate reclaimed water proposal filed under §210.42 of this title (relating to Request to Executive Director). Within 60 days, the executive director shall identify in writing to the requestor any additional information necessary for the executive director to act on the request, and provide the requestor sufficient time to provide such information. Following the receipt of such information, the executive director shall act on the request, either granting or denying the proposal, in whole or in part. If no additional information is requested, the executive director shall act on the request within 60 days, either granting or denying the proposal, in whole or in part.

These provisions allow TCEQ to authorize a reclaimed water system, which may include subsequent potable water treatment technology, prior to the ultimate beneficial use. In essence, as part of the review described above pursuant to TAC Section 290.41, TCEQ may review and approve a DPR project, which will include an ultimate end beneficial use, as part of the provisions of Subchapter D of Chapter 210.

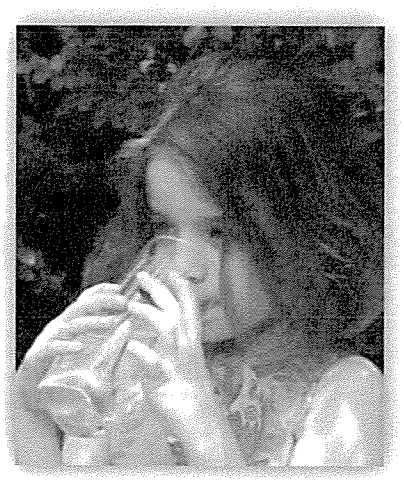


8.3 Recommended Process for Seeking Regulatory Approval of a Direct Potable Reuse Project

As discussed earlier, it is strongly recommended that any entity wishing to pursue the planning and implementation of a DPR project meet with the TCEQ Water Supply, Water Quality and Water Availability Division staff early in the process, while potential alternatives are still in the conceptual phase. Early meetings will allow the TCEQ to advise the PWS and make recommendations that can help avoid delays and clarify the regulatory approval process. The general regulatory steps that should be considered when pursuing approval for a DPR project are summarized in Figure 8-1.

However, since approval of DPR projects is carried out on a case-by-case basis, the steps outlined in Figure 8-1 should only be used as an example and should not be considered comprehensive. Specific requirements should be clarified and defined through individual meetings with the TCEQ.

When planning a project, sufficient time should be allocated to allow for review by the TCEQ and public notice, when required. While the time needed for each step can vary and will depend on the specific project, a minimum of 2-3 years should be set aside to receive construction approval, following the time that conceptual alternatives are initially presented to the TCEQ.



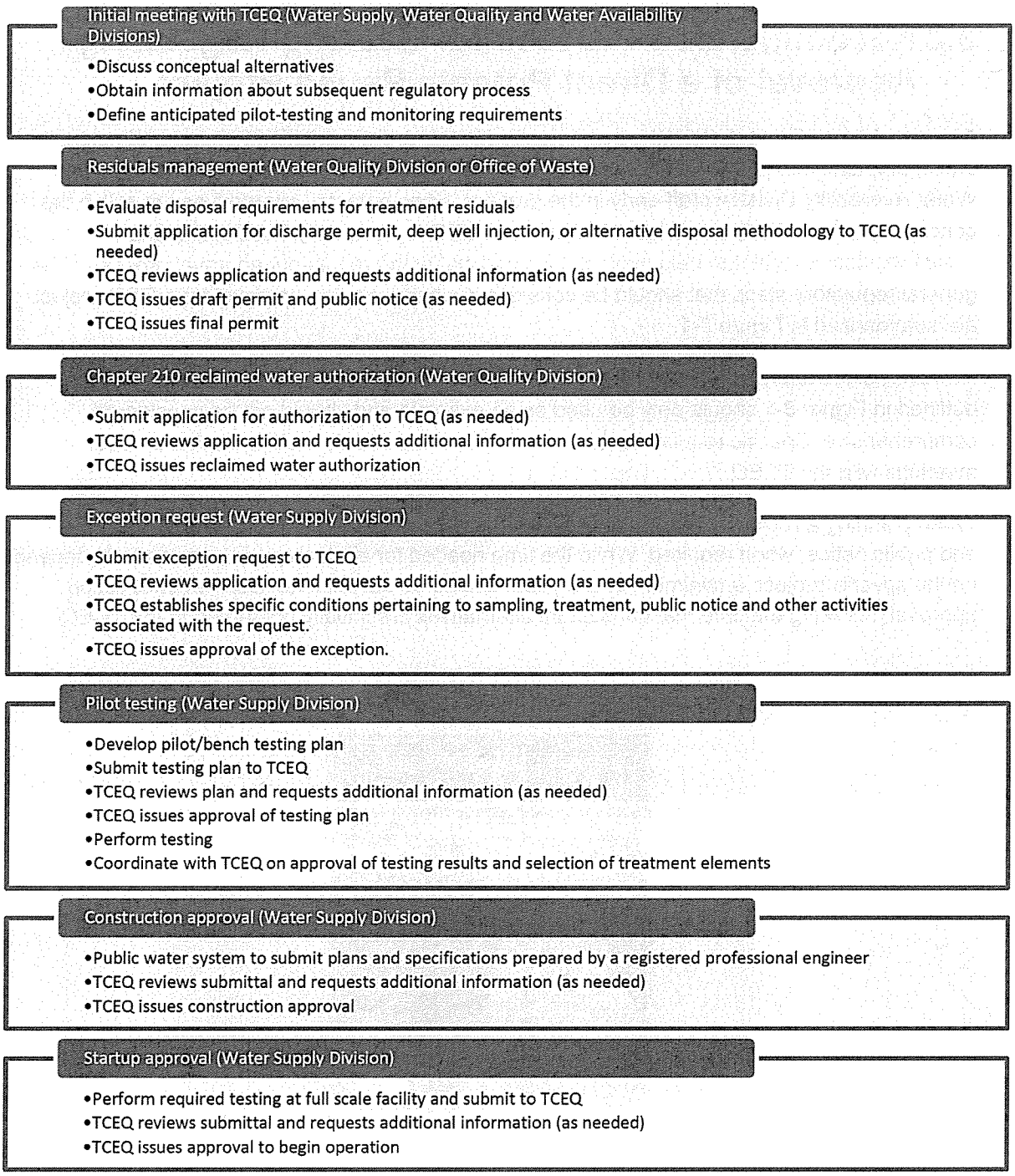


Figure 8-1: Suggested steps for obtaining regulatory approval of a direct potable reuse project

Texas Environmental
SUPERCONFERENCE
August 7, 2015

Presented by:

Brad
Castleberry
bcastleberry@
lglawfirm.com

Water Issues:

That's water under the bridge

Lloyd Gosselink
ATTORNEYS AT LAW

SUPERCONFERENCE

The 84th Regular Session

- Tax Relief – Franchise / Sales / Property Taxes
- Open Carry / Campus Carry
- Border Security
- Public School Finance
- Transportation
- Government Transparency
- New faces;
  - **Senate** – 9 Freshmen / 5 Sophomores
  - **House** – 25 Freshmen / 19 Sophomores
- New leadership – Governor, Lt. Governor, & Committee Chairs

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House Bill 30 (Larson)

Brackish Groundwater Production Zones

- This bill addresses the development and production of brackish groundwater resources in Texas via amendments to Chapter 16, TWC.
- The bill imposes requirements on Regional Water Planning Groups and the TWDB to investigate and report on opportunities for the development of brackish groundwater (including desalination projects).
- In its required report to the Governor, the TWDB will designate "brackish groundwater production zones" in areas of the state with moderate to high availability and productivity of brackish groundwater that can be used to reduce the use of fresh groundwater.
- Effective immediately

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House Bill 200 (Keffer)

DFC Appeals

- As a part of the statewide water planning process, Groundwater Management Areas (GMAs) are large geographic groups comprised of representatives of the local GCDs.
- GMAs meet to set "desired future conditions" – what those representatives would like their local aquifers to look like in 50 years Used as basis for permitting decisions.
- This bill sets a process to challenge a GCDs decision in setting its DFCs for relevant aquifers through contested case hearings and substantial evidence appeals to a district court with jurisdiction over any part of the territory of the GCD that issued the final order on its DFC.
- Effective on September 1, 2015

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SUPERCONFERENCE

House Bill 655 (Larson)

Aquifer Storage and Recovery (ASR)

- This bill is a comprehensive reform of state laws regarding Aquifer Storage and Recovery (ASR) projects. Adds Subchapter G to Ch. 27 of Water Code.
- The bill generally exempts ASR projects from Water Code Ch. 11 permitting requirements.
- Subchapter G authorizes ASR projects to secure a Class V UIC authorization; considerations for permit:
  - extent to which water injected can be recovered,
  - the effects of the project on existing wells in the area, and
  - the potential for polluting groundwater.
- Effective Immediately

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ATTORNEYS AT LAW

House Bill 949 (Lucio)

Water Loss Mitigation

- Bill provides a small amendment to 16.0121(g) of the Water Code.
- Under current law, a retail public utility that receives financial assistance from TWDB must use a portion of the financial assistance to mitigate the utility's system water loss if the water loss meets or exceeds the threshold established by TWDB rule.
- This bill would allow TWDB (at the request of a retail public utility) to waive the requirements of this section if TWDB finds that the utility is satisfactorily addressing the utility's system water loss.
- Effective immediately

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SUPERCONFERENCE

House Bill 4097 (Hunter)

Desalination Projects

- This bill amends the Utilities Code and the Water Code to require TCEQ to adopt rules allowing for industrial use of desalinated seawater.
- TCEQ would be authorized to issue permits for desalination of seawater for use for industrial purposes, and also authorizes underground injection of desalination residuals
- Requires TCEQ and ERCOT to participate in studies analyzing:
  - (1) the impacts on seawater transmission and distribution infrastructure; and
  - (2) the potential economic benefits including the impact on demand response opportunities in the ERCOT market.
- Effective immediately

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SUPERCONFERENCE

Senate Bill 912 (Eltife)

Sanitary Sewer Overflows

- Bill amends Water Code Ch. 26 to exempt certain accidental spills from wastewater collection and treatment facilities from TCEQ reporting requirements if:
  - the spills occur at facilities owned by local governments,
  - are 1000 gallons or less in volume,
  - are not associated with larger volume spills, and
  - are controlled such that they don't enter state streams, adversely impact public or private water supply sources, and are not a danger to the public or environment.
- Monthly reporting of such spills to TCEQ is required, and TCEQ is required to adopt rules to standardize the method for calculating the volume of spills.
- In order to secure the exemption, the spill must not otherwise be subject to local regulatory control and reporting requirements.
- Effective immediately

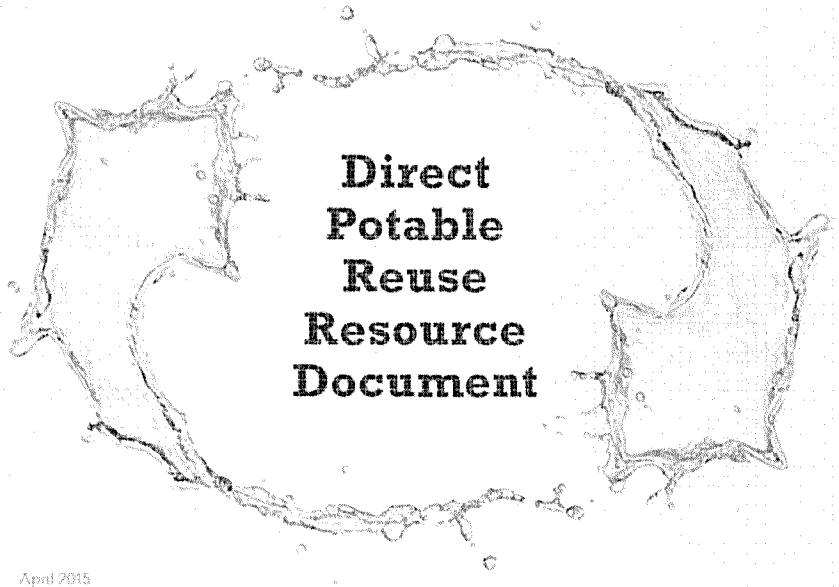
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SUPERCONFERENCE

Texas Water Development Board

1700 North Congress Avenue
Austin, Texas 78711

FINAL REPORT



Direct Potable Reuse Resource Document

April 2015

TBPE Firm Registration No. F-12

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ENVIRONMENTAL ENGINEERS AND SCIENTISTS

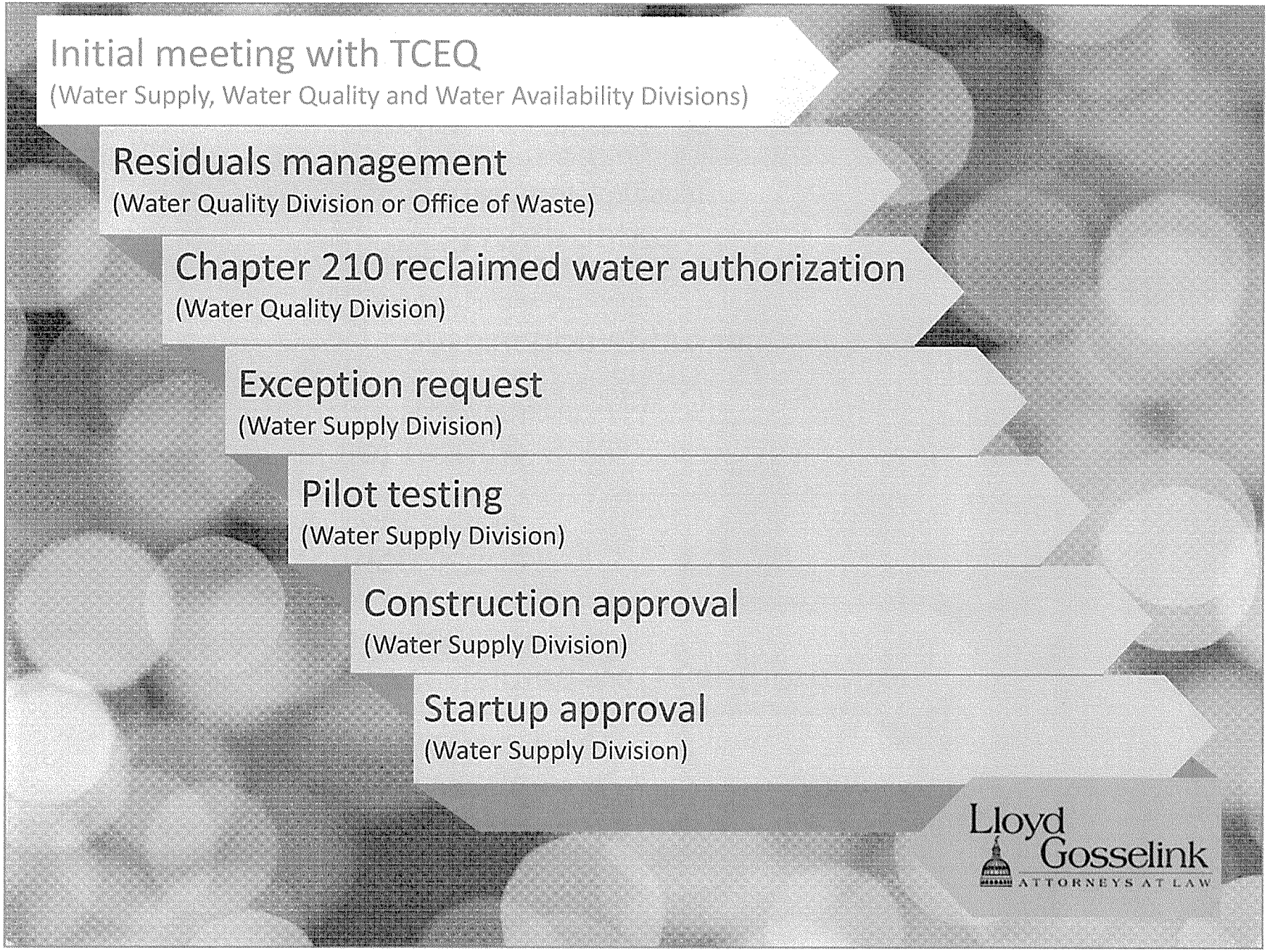
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Volume 1 of 2

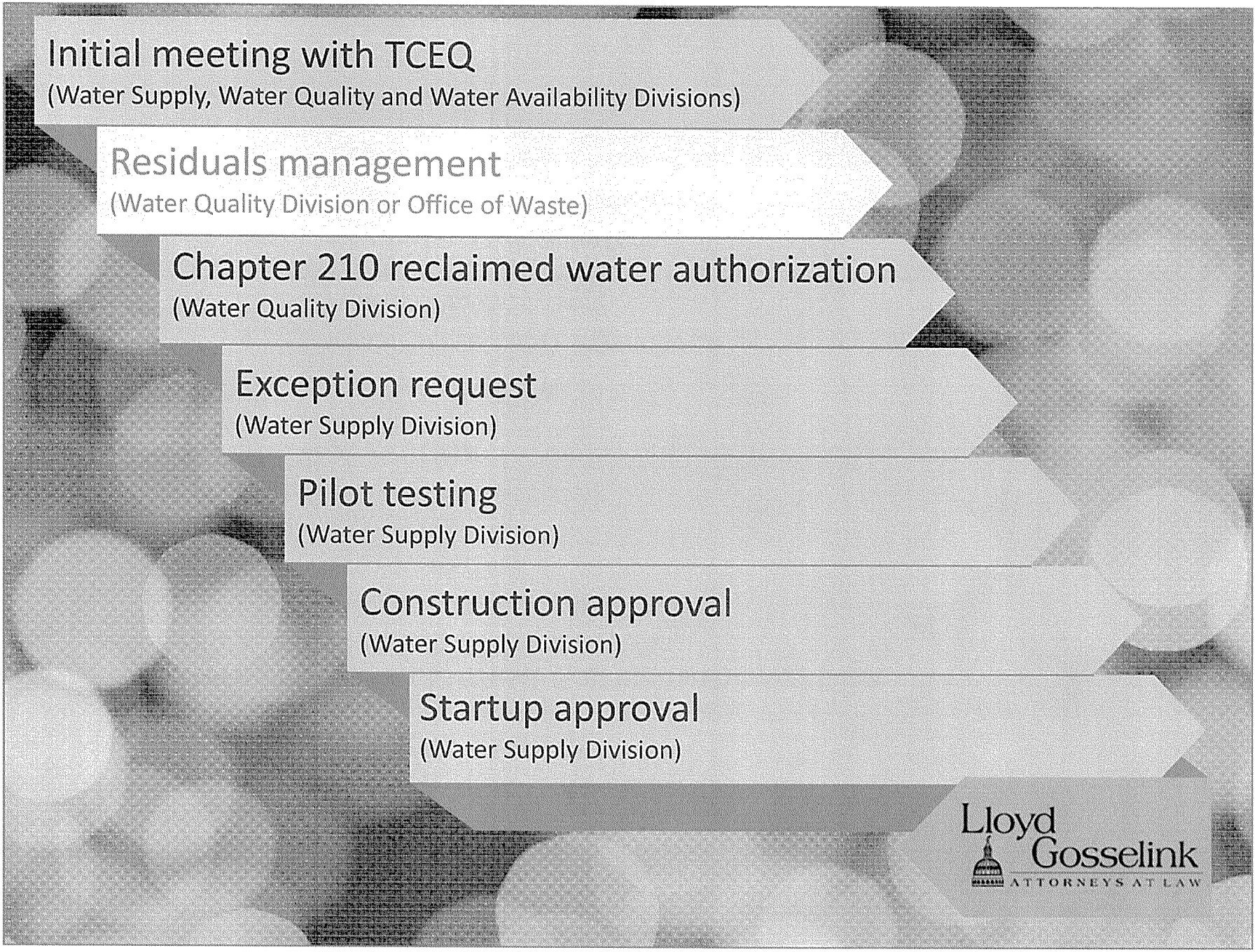
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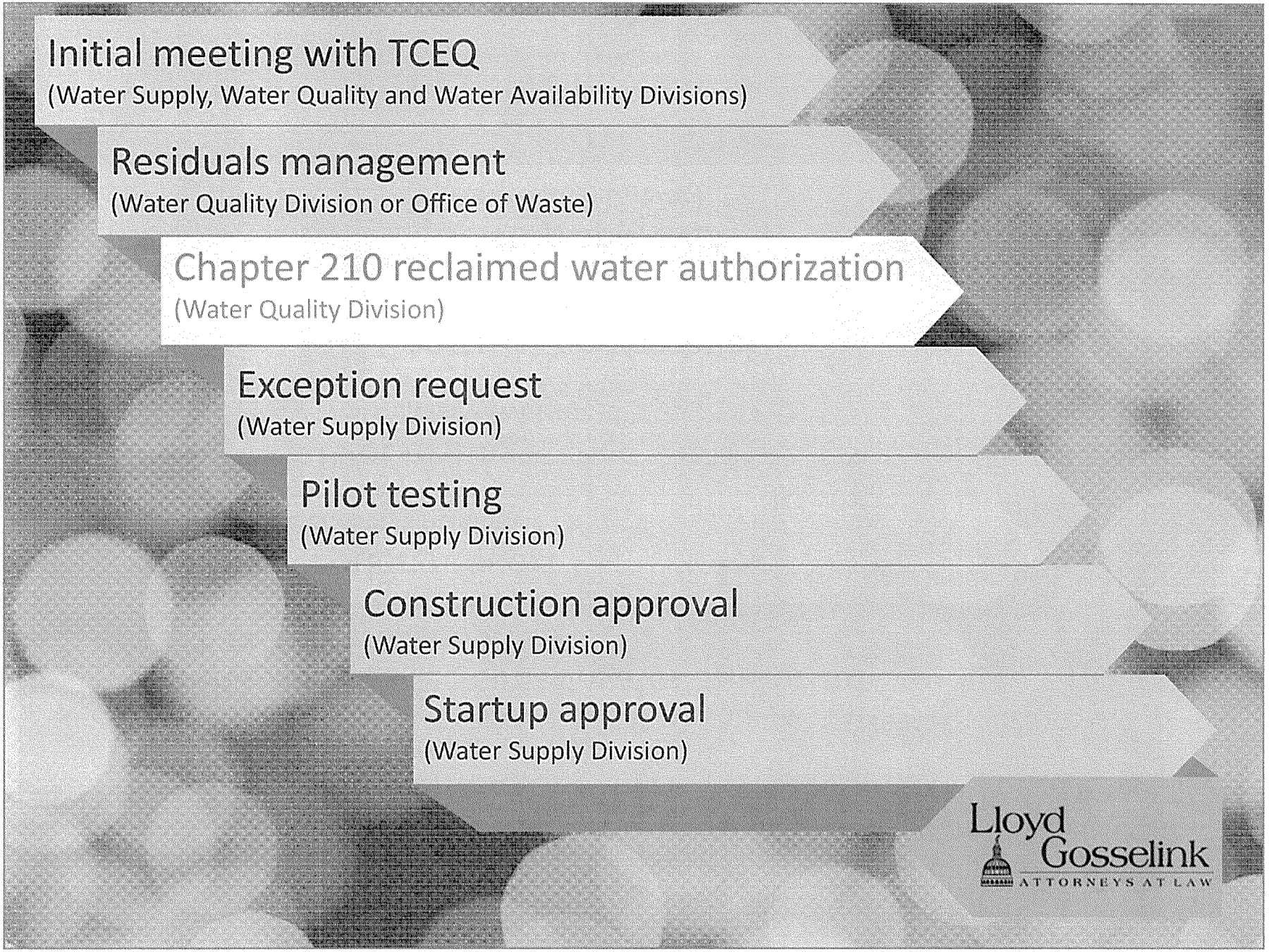
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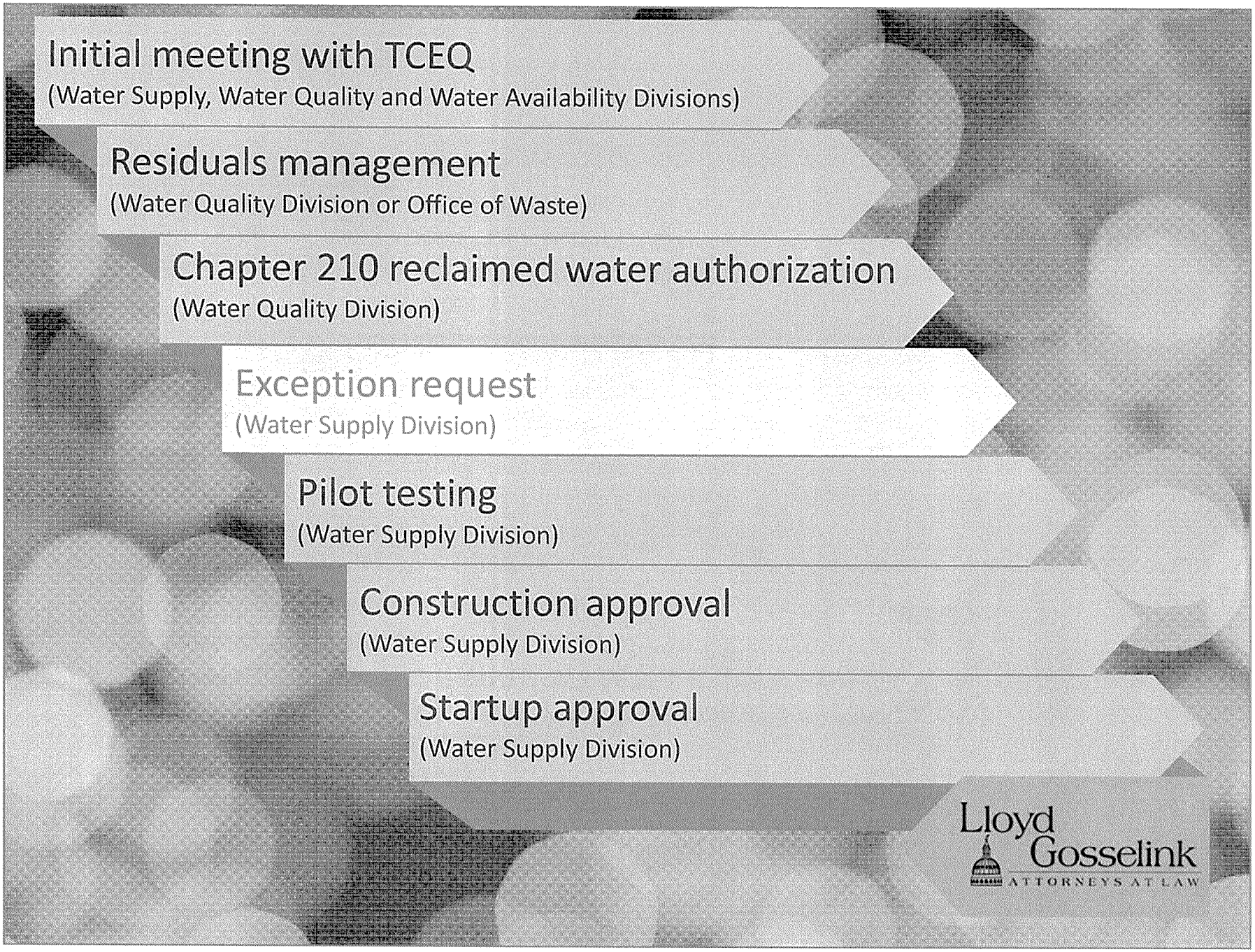
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Initial meeting with TCEQ
(Water Supply, Water Quality and Water Availability Divisions)
Residuals management
(Water Quality Division or Office of Waste)
Chapter 210 reclaimed water authorization
(Water Quality Division)
Exception request
(Water Supply Division)
Pilot testing
(Water Supply Division)
Construction approval
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Startup approval
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Steps for Regulatory Approval of Direct Potable Reuse Projects
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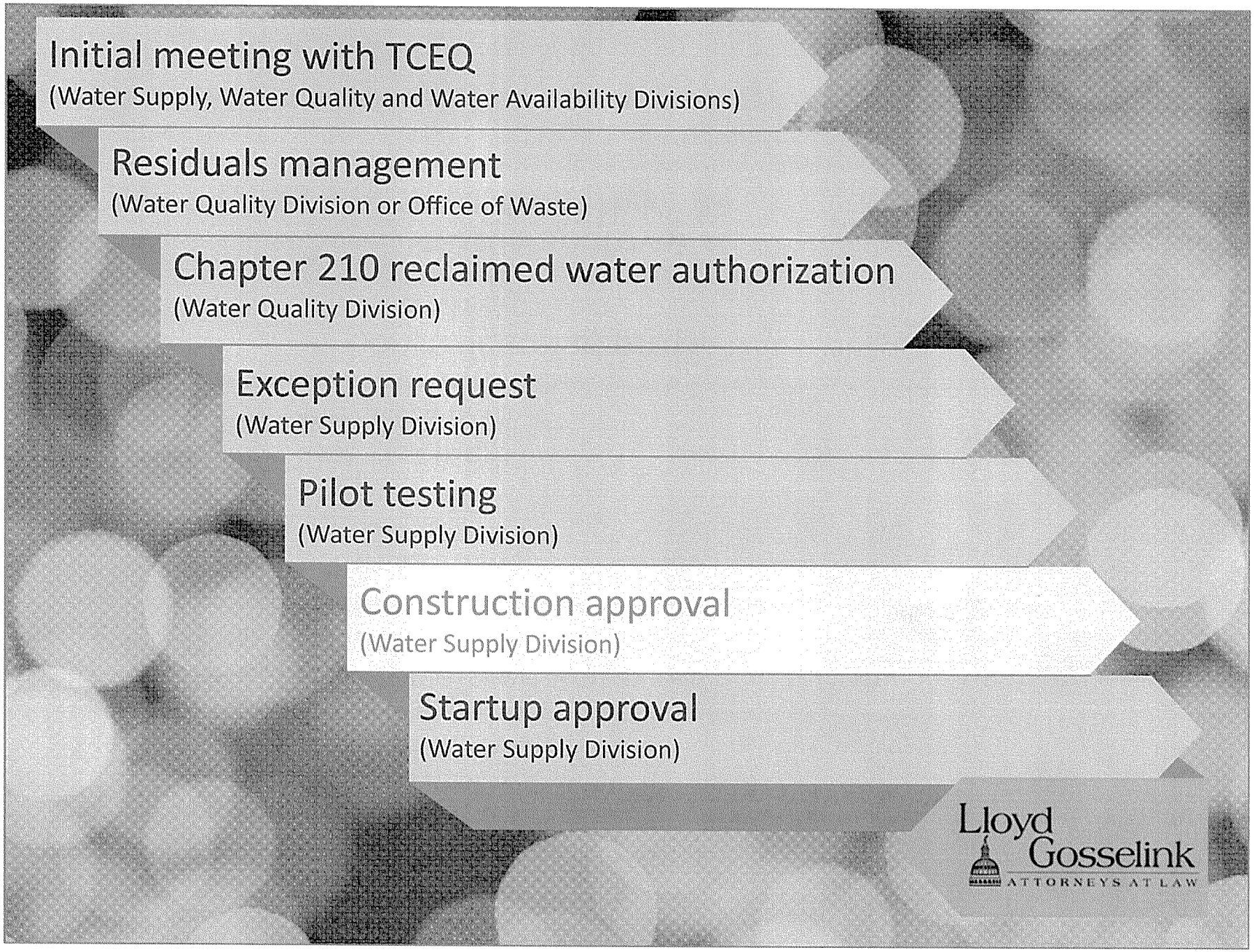

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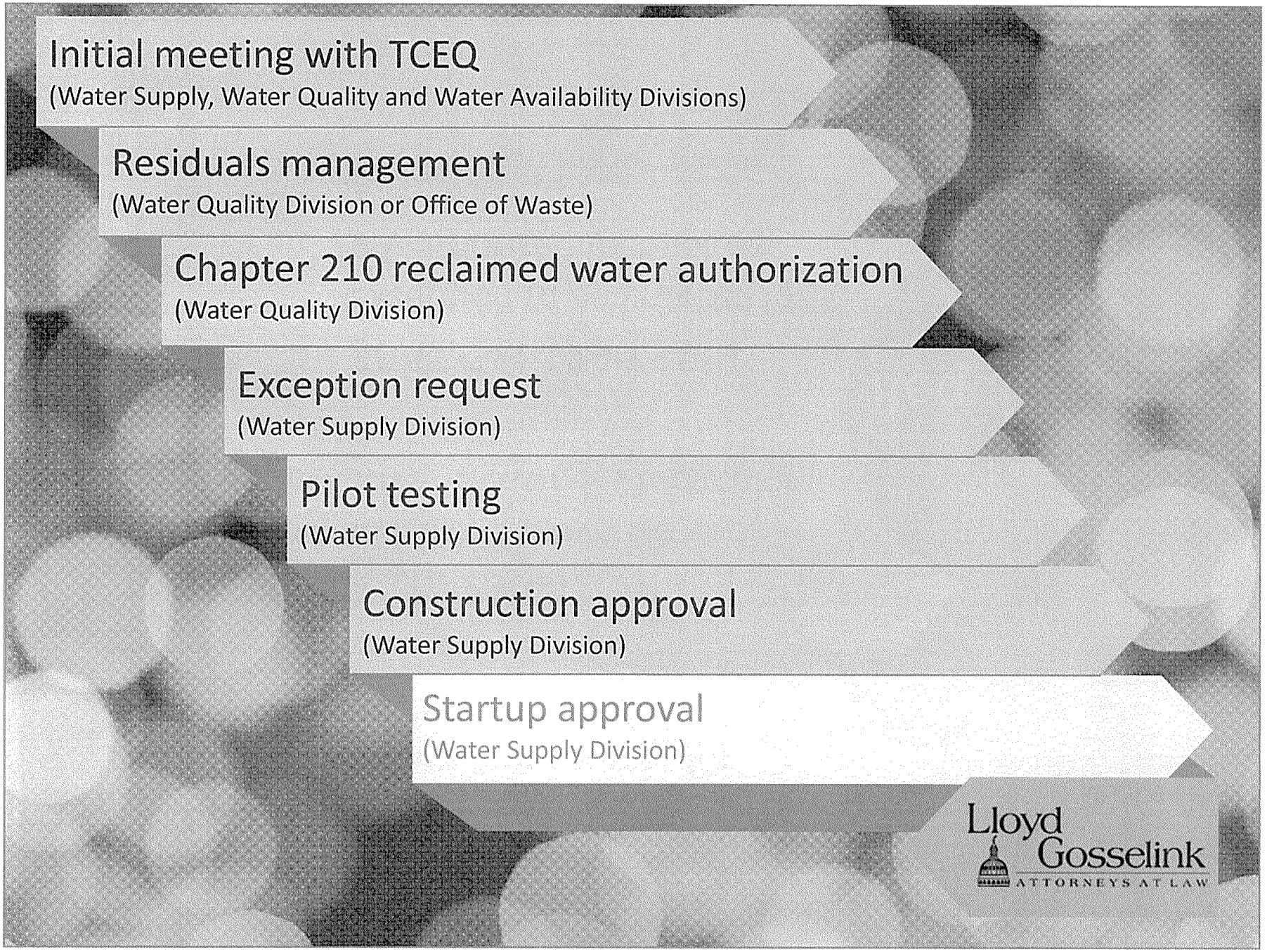

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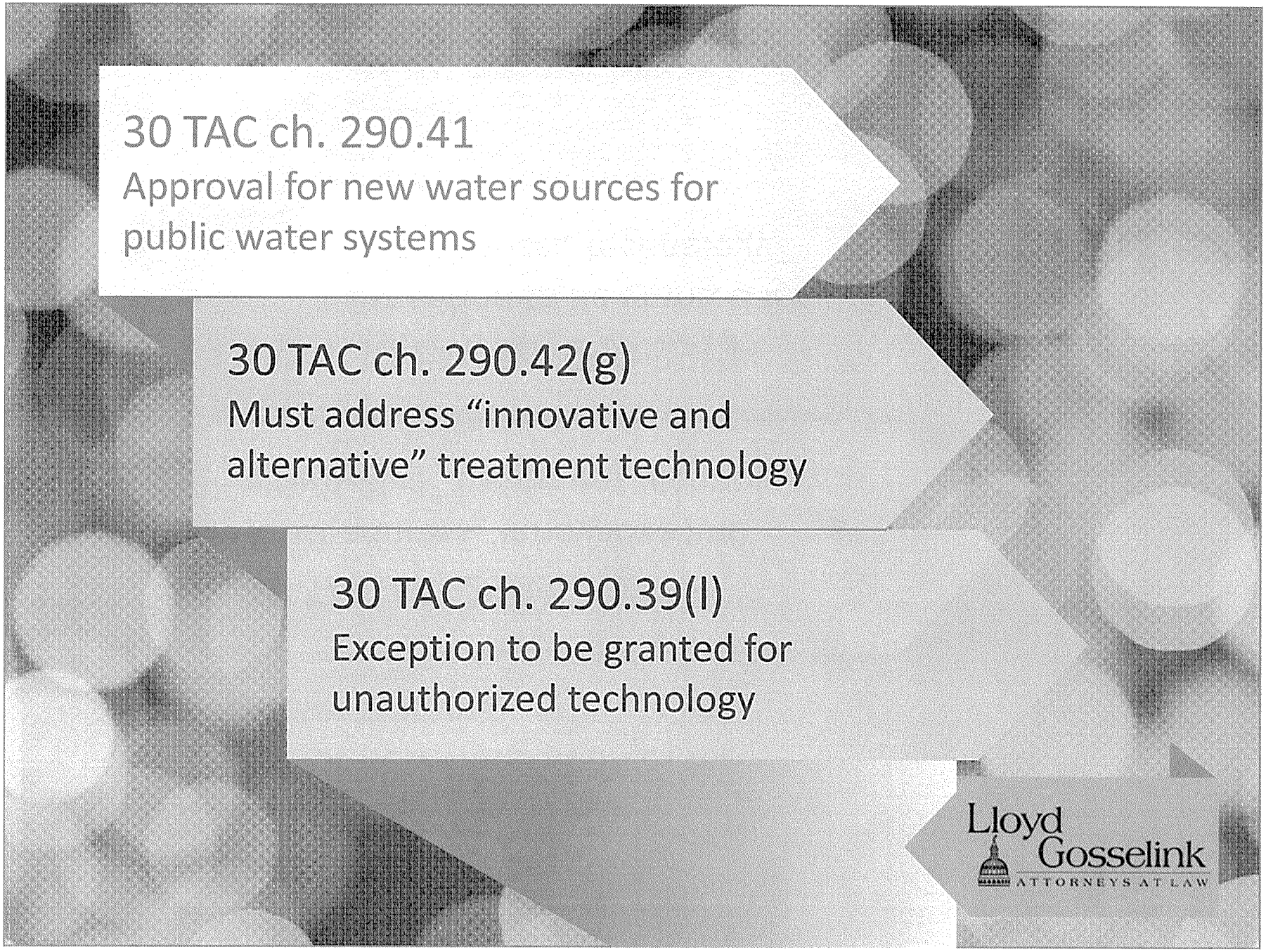

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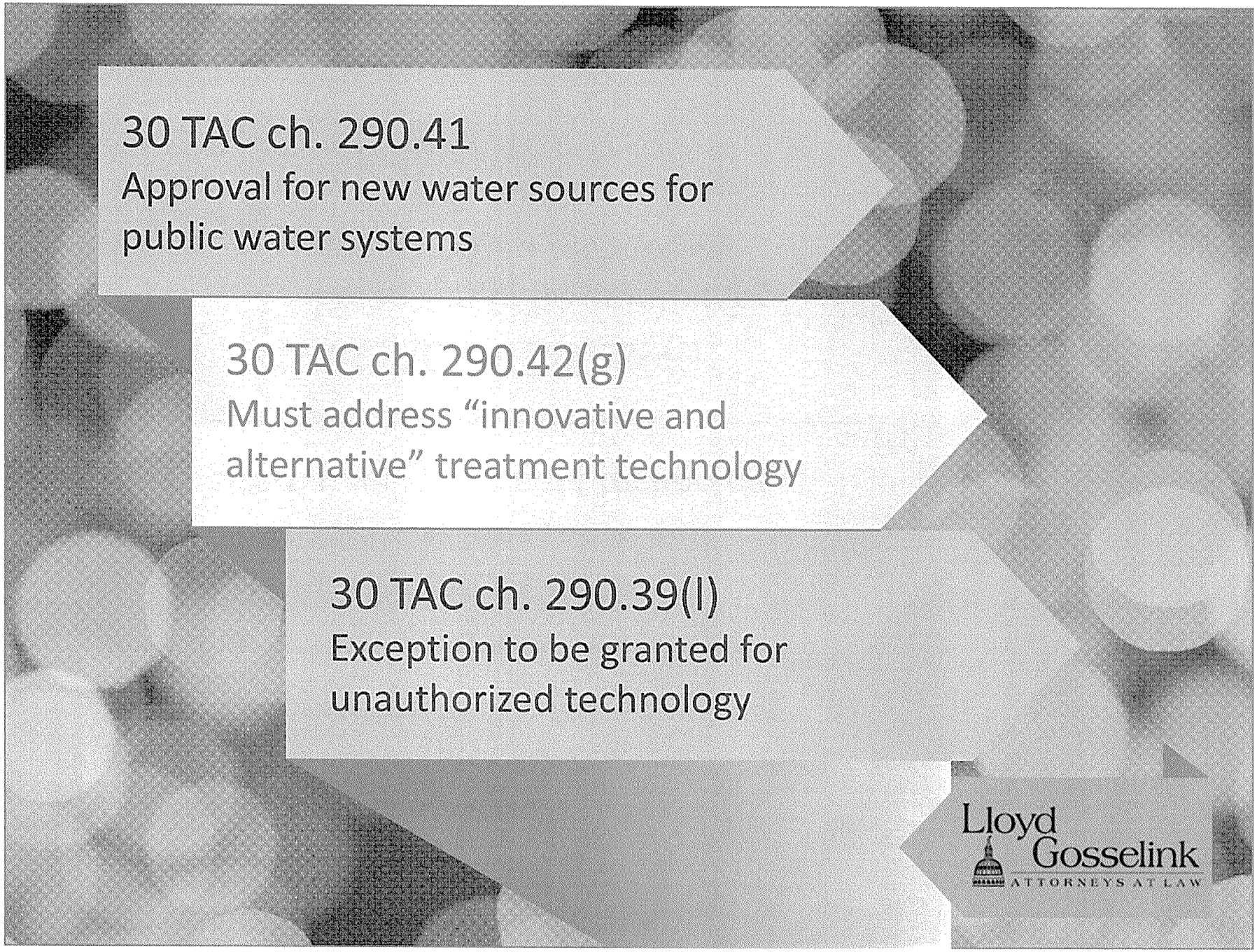

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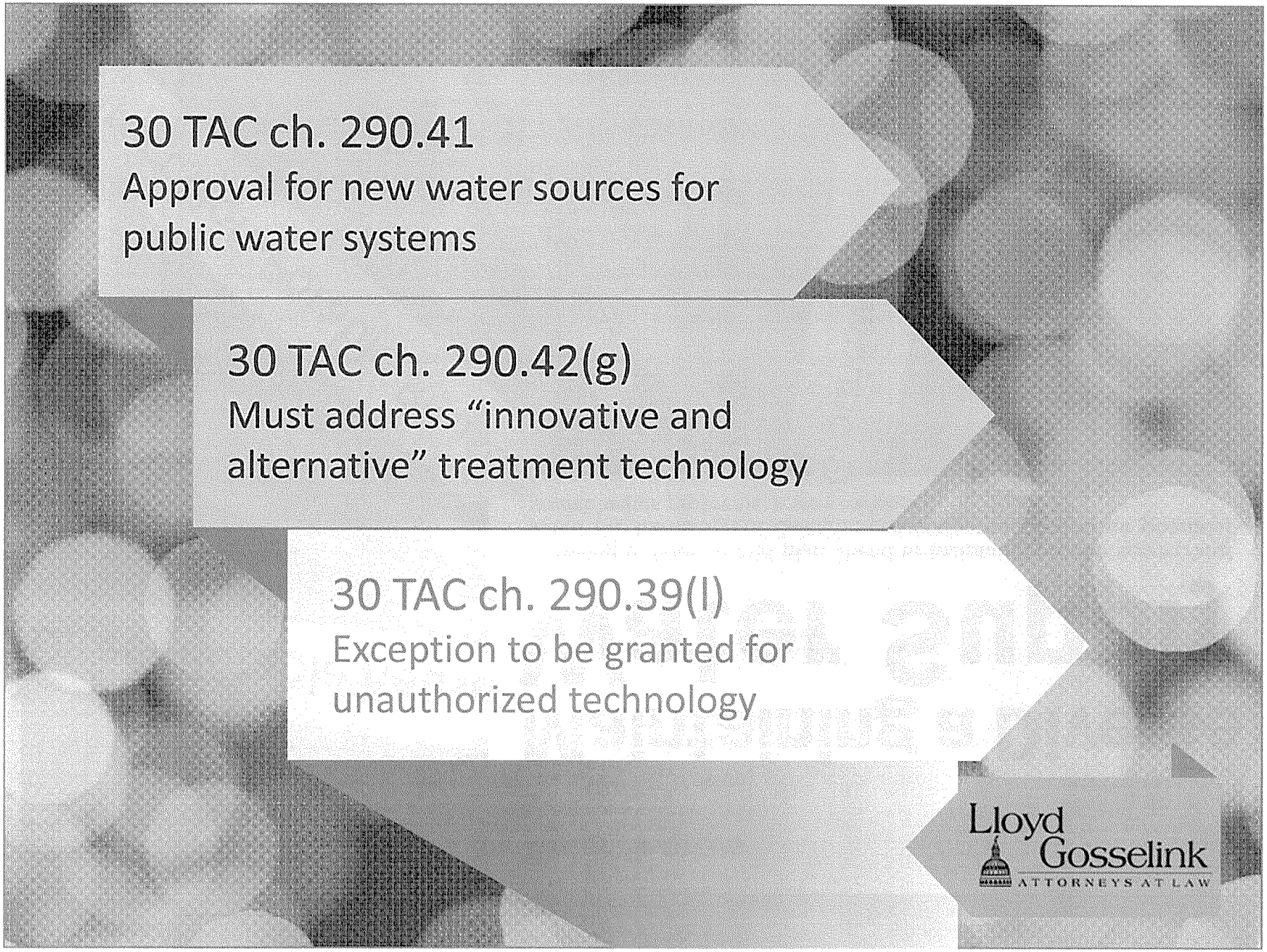

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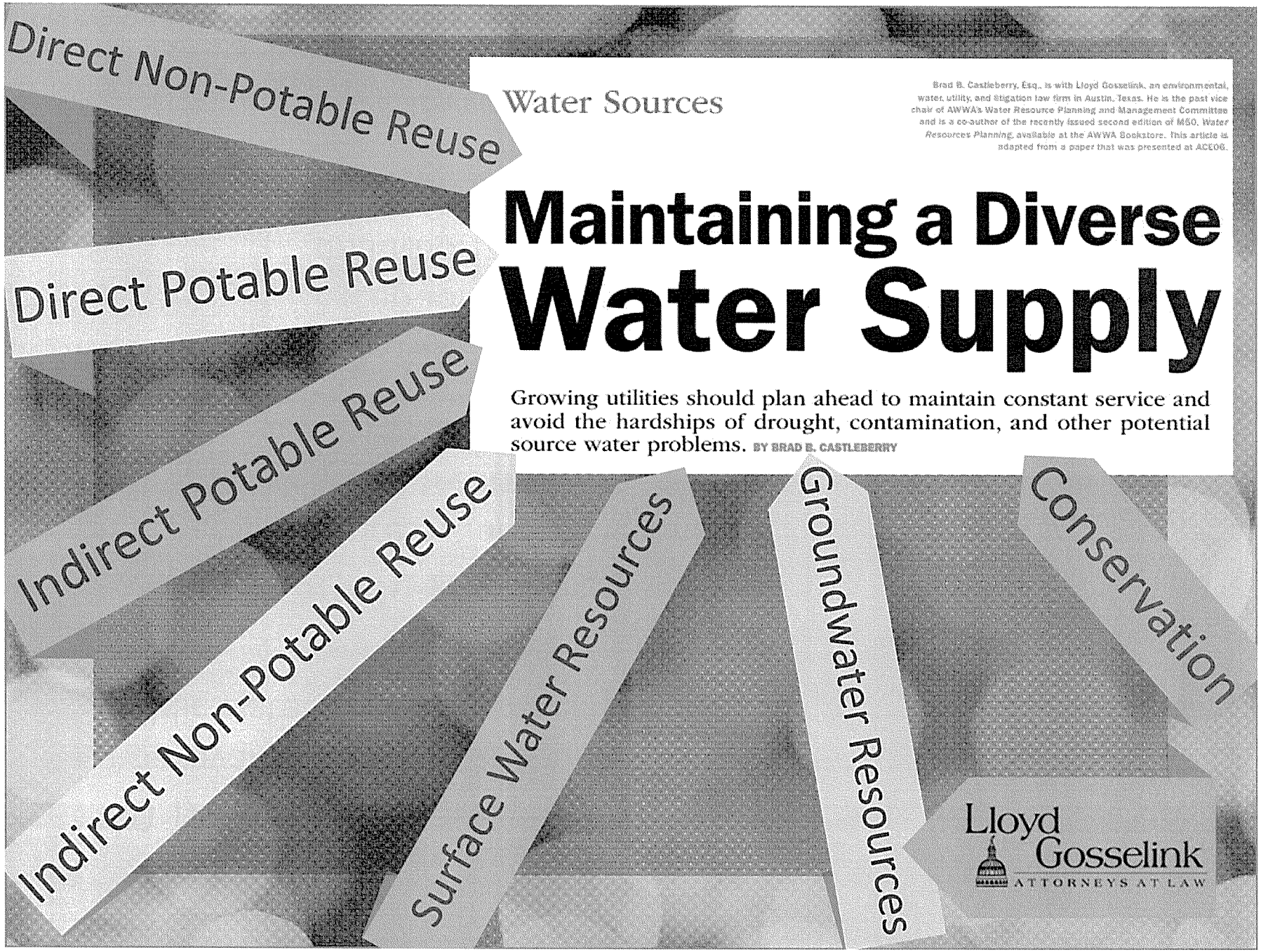

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Approval for new water sources for public water systems
30 TAC ch. 290.42(g)
Must address "innovative and alternative" treatment technology
30 TAC ch. 290.39(l)
Exception to be granted for unauthorized technology
Legal Requirements
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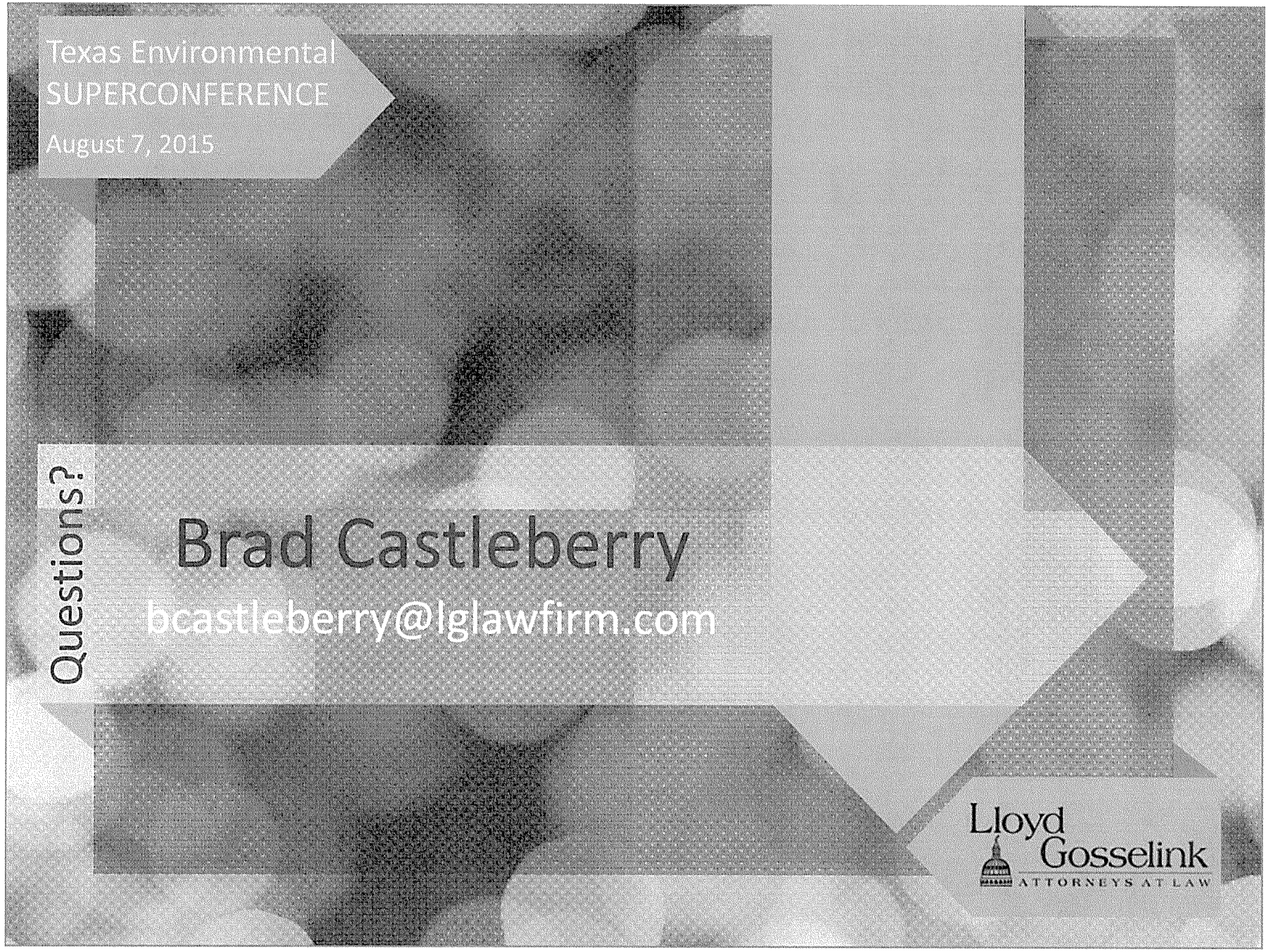


Water Sources

Brad B. Castleberry, Esq., is with Lloyd Gosselink, an environmental, water, utility, and litigation law firm in Austin, Texas. He is the past vice chair of AWWA's Water Resource Planning and Management Committee and is a co-author of the recently issued second edition of M50, *Water Resources Planning*, available at the AWWA Bookstore. This article is adapted from a paper that was presented at ACE06.

Maintaining a Diverse Water Supply

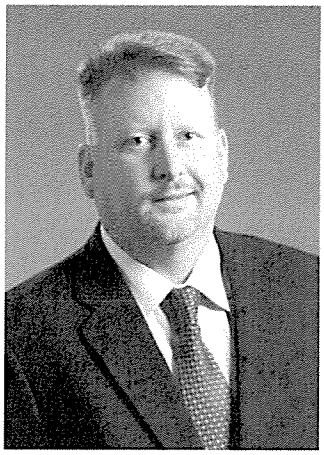
Growing utilities should plan ahead to maintain constant service and avoid the hardships of drought, contamination, and other potential source water problems. BY BRAD B. CASTLEBERRY


Texas Environmental
SUPERCONFERENCE
August 7, 2015
Questions?
Brad Castleberry
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Lloyd Gosselink
ATTORNEYS AT LAW

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BRAD B. CASTLEBERRY PRINCIPAL

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As a member of our Water Practice Group, Brad represents clients on the myriad issues surrounding water law and water supply planning, natural resources, water quality, environmental permitting and defense, and construction litigation. He's also established qualifications as a mediator, and is a licensed Professional Engineer.

Prior to joining Lloyd Gosselink in 2002, Brad practiced engineering, assisting clients in the planning, design, and construction of water, wastewater, and other municipal projects. He's the Past President of Water Environment Association of Texas (WEAT).

While in law school, Brad was student Managing Editor for the Texas Environmental Law Journal, and he recently served as an adjunct Professor of Water Law at Texas Tech University School of Law.

PRACTICE AREAS

- Water
- Litigation
- Renewable Energy

PROFESSIONAL LICENSES & EDUCATION

- Admitted to State Bar of Texas (2002)
- Licensed Professional Engineer
- J.D., University of Texas School of Law (2002)
- BSCE, Highest Honors, University of Texas at Austin (1993)

REPRESENTATIVE EXPERIENCE

- Administrative law practice with emphasis in the field of environmental, water and natural resources law
- Water supply planning and permitting, water quality management, and environmental defense
- Representative projects include permitting of reservoirs and water reuse projects, permitting for wastewater treatment and disposal facilities, storm water permitting, Clean Water Act § 404 permit matters, environmental compliance, and environmental litigation and defense

PUBLICATIONS AND PRESENTATIONS

- Co-Author, "Environmental Enforcement," Chapter 4 Vol. 45 Texas Practice, Environmental Law, (2013)
- Co-Author, "The Potential Impact of Federal Laws on State Water Supplies," Journal of Real Property Law, Vol. 1, No. 1, p. 99 (2013)
- Co-Author, "83rd Texas State Legislature: Summaries of Water-related Legislative Action," Vol. 4 Texas Water Journal, p.28 (2013)
- Co-Author, "Hydraulic Short-Circuiting: The Potential Impact of Certain Federal Laws on State Water Supplies," BNA Bloomberg Water Law & Policy Monitor, January 30, 2013
- Author, "Sustainable Water Resources: A Compendium of Issues and Trends," Chapter 19, American Water Works Association, 2010
- Author, "Terrorism and Chemical Security Issues for Water and Wastewater Treatment Facilities," George Mason University The CIP Report, Vol. 7, No. 11, May 2009
- Co-Author, "Texas Agency Structure", Vol. 45 Texas Practice, Chapter 2 (Environmental Law), 2002-2008 Supplements
- Co-Author, "Texas Law of Water Resources," Texas Practice Guide, Chapter 19 (Meeting Water Supply Needs – Planning, Permitting, and Implementation), 2008
- Co-Author, 2nd Ed. AWWA M50 "Manual on Water Supply Planning"
- Author, "Maintaining a Diverse Water Supply," AWWA OPFlow Magazine, July, 2007
- Author, "Environmental Flow Considerations for Texas," Vol. 34 Texas Environmental Law Journal, p. 283 (2003-2004)

PROFESSIONAL ASSOCIATIONS AND MEMBERSHIPS

- American Bar Association
- State Bar of Texas
  - Environmental and Natural Resources Law Section
  - Construction Law Section
- Austin Bar Association
- American Water Works Association
- Water Environment Federation
- Water Environment Association of Texas

HONORS AND AWARDS

- Selected for inclusion by Thomson Reuters for Texas Super Lawyers – Rising Stars Edition, 2010 and 2011
- Texas AWWA Service Award, 2005
- WEAT Outstanding Service Award, 2009
- Water Environment Federation Bedell Award, 2010



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For more than 20 years, Suzanne Murray has combined her passion and experience in the public and private sectors to consistently deliver results in environmental law and public policy in resource-limited situations. She demonstrates analytical skill on difficult legal and policy issues which have national implications.

Suzanne has served at the U.S. Environmental Protection Agency since 1997 and from 2008 to 2015 as Regional Counsel for Region 6, where she was responsible for regulatory and enforcement matters for Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Key areas of practice include rulemaking under the Clean Air Act, legal advice and guidance for regulatory actions in the region, direction on judicial and administrative environmental enforcement, emergency response activities, Superfund and Brownfields activities, information law, and criminal prosecution of environmental laws.

In this capacity she represented EPA in high profile matters such as the Macondo response, Hurricane Katrina response GHG Permitting, and EPA's enforcement of all national priorities. During her time at the EPA, Suzanne was awarded several commendations for "Outstanding Performance" by the EPA and DOJ.

Through her experience at the EPA, Suzanne has built strong and productive relationships with State and Federal partners, the regulated community, environmental advocacy groups and communities. Suzanne also serves on the advisory board for the Kay Bailey Hutchison Center for Energy, Law and Business at the University of Texas.

Professional and Community Activities

- Texas Horse Park Foundation Board – Board Member
- Chair, American Ireland Fund, Emerald Ball, 2014
- Girl Scout leader for more than 10 years
- Advocacy for people with cognitive disabilities
- Member Angels of Charity, Catholic Charities of Dallas
- Advisory Board, Kay Bailey Hutchison Center for Energy, Law and Business at the University of Texas

Practices and Industries

- Environmental
- Permitting, Regulatory Counseling and Compliance
- Energy, Power and Natural Resources
- Litigation
- Energy Litigation

Education and Clerkships

- J.D., University of New Mexico School of Law, 1994, *Natural Resource Law Reporter*, Editor, 1993-1994
- B.A., Trinity University, 1990
- Intern to Reena Raggi, Eastern District of New York, Spring 1994
- Intern to Michael H. Dollinger, Southern District of New York, Spring 1994

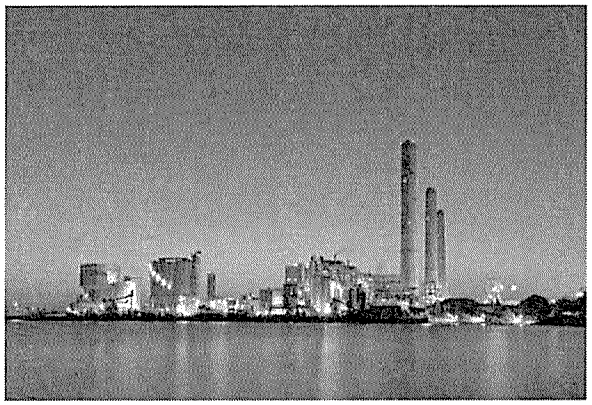
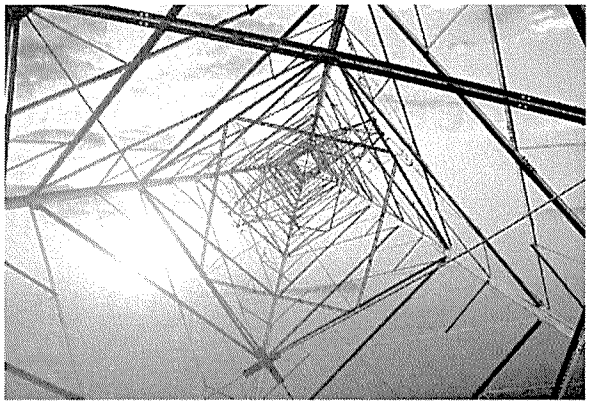
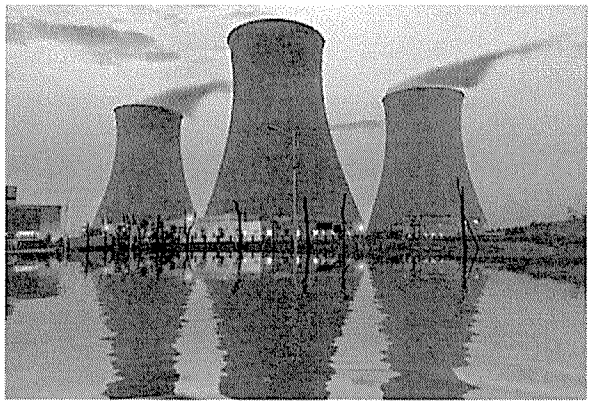
Bar Admissions

- Texas, pending
- New York

Court Admissions

- U.S. District Court for the Southern District of New York
- U.S. District Court for the Eastern District of New York

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EPA's Clean Power Plan
The Sky is the Limit

Richard Alonso, Bracewell & Giuliani LLP
Texas Environmental Superconference

August 7, 2015

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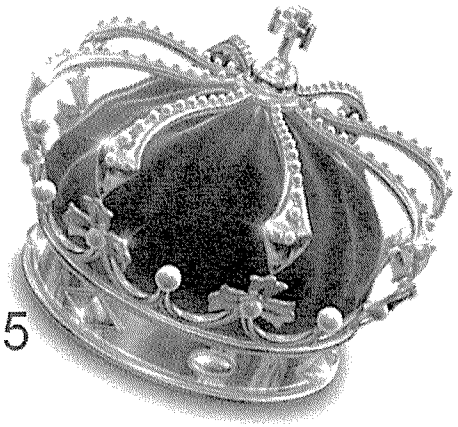
Let's Get This Party Started

- "Legacy Issue"
- Federal standards for new plants
- State standards for existing plants
- Overview of Clean Power Plan
- Legal vulnerabilities
- What to expect over next 2 years



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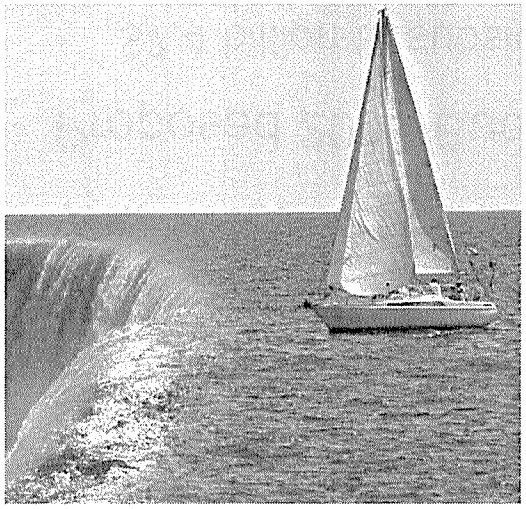
A Legend In His Own Mind



- State of the Union Message – 2013, 2014, 2015
- President's "Climate Action Plan"
- White House National Security Strategy
- Proposed 2015 Budget
  - $7.4 billion to subsidize deployment of clean energy
  - $4 billion for states that go beyond Clean Power Plan
  - $500 million for new "Green Climate Fund"
  - $239 million for EPA's "Clean Power Plan"
  - $100 million for expedited permitting of renewable energy projects

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International Efforts – ***World of Trouble***



- Paris Conference in December 2015
- "Landmark" U.S. – China Agreement
  - China's GHG emissions to peak by 2030
  - China to get 20% of power from renewables by 2030
  - U.S. to Reduce GHG emissions from 2005 levels 26-28% by 2025

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WHERE's THE BEEF

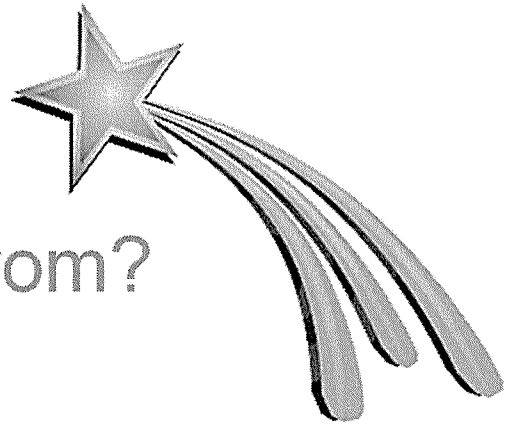


US Commitment:

Reduce GHG emissions from 2005 levels 26-28% by 2025

- Submitted as the U.S. "Intended Nationally Determined Contribution" (INDC) for the Paris Conference
- No evidence of how goal was calculated
- Bookbinder analysis, shortfall of 330 MMT -- http://elementviconsulting.com/president-obamas-dubious-climate-promises/

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Where Do Reductions Come From?
Wishing Upon a Star

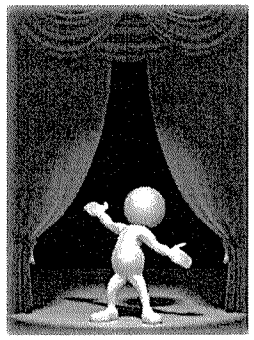
- Clean Power Plan
- 2017-2025 fuel economy standards for light duty vehicles
- 2019 fuel economy standards for heavy duty vehicles
- Energy efficiency standards
- "Actions to cut methane emissions from landfills, coal mining, agriculture and oil & gas systems"

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Section 111(b) NSPS – ***Down and Out for New Coal***

- Apply to any plant constructed after proposal date
- An emission rate standard that can be achieved with the "best system of emission reduction that has been adequately demonstrated" (BSER)
- Coal-fired units 1,100 lbs/MWh ***(nail in the coffin)***
- NGCC > 850 mmBtu/hr 1,000 lbs/MWh
- NGCC < 850 mmBtu/hr 1,100 lbs/MWh

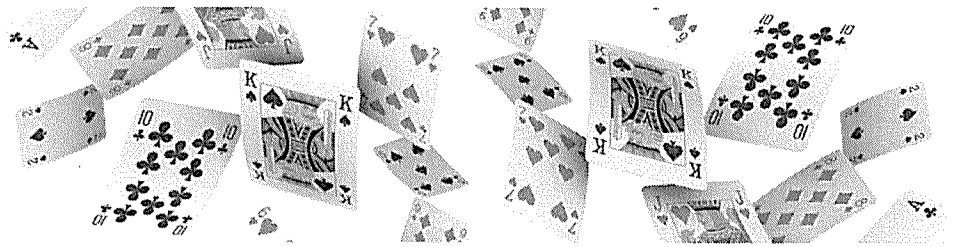
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Section 111(d) – the Clean Power Plan

- With new source standards in place, EPA can require states to submit a plan with standards for existing sources
- EPA publishes "Emissions Guidelines" to guide states in setting standards for existing sources
- Emissions Guidelines based on "best system of emission reduction that has been adequately demonstrated"
- State plan must be submitted for EPA approval. If not "satisfactory," then EPA must impose a federal plan

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Proposed Clean Power Plan – *A House of Cards*

Best System of Emission Reduction includes 4 Building Blocks

- An average heat rate improvement of 6% for all existing coal-fired plants
- Change dispatch to disfavor coal until combined cycle natural gas plants have average capacity factor of 70%
- Requirements for construction and operation of more wind and solar
- End-user energy efficiency programs to improve statewide efficiency by 1.5% a year from 2020 to 2030

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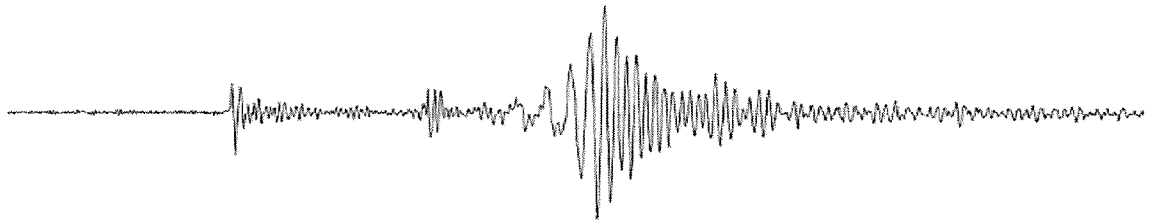
Proposed Clean Power Plan – State Targets – *Picking Winners and Losers*



State	2012 CO_2 Emission Rate (Fossil, Renew. and 6% Nuclear) (lbs/MMwh)	Interim CO_2 Goal (2020-2029 average) (lbs/MMwh)	Interim Goal Percent Reduction (Compared to 2012)	2030 CO_2 Goal (2030 and thereafter) (lbs/MMwh)	2030 Goal Percent Reduction (Compared to 2012)
Washington	763	264	-65%	215	-72%
South Carolina	1,587	840	-47%	772	-51%
New York	983	635	-35%	549	-44%
Texas	1,298	853	-34%	791	-39%
Colorado	1,714	1,159	-32%	1108	-35%
Pennsylvania	1,540	1,179	-23%	1,052	-32%
Kentucky	2,158	1,844	-15%	1,763	-18%
North Dakota	1,994	1,817	-9%	1,783	-11%
Vermont	No affected sources				
D.C.					

Source: NRDC, Summary of EPA's Clean Power Plan at 5 tbl.2 (June 2, 2014), available at http://www.nrdc.org/air/pollution-standards/files/pollution-standards-epa-plan-summary.pdf

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What's Wrong with this Picture; On Shaky Ground

- Threshold Issue – Section 112 vs. 111(d)
  - House Language – *No source* category regulated under Section 112 can be regulated under Section 111(d)
  - Senate Language – *No pollutant* regulated under Section 112 can be regulated under Section 111(d)
- Constitutional Issues
- Statutory issues – "outside the fence line"
- Issues with Individual Building Blocks
- Multi-State Plans

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*Doesn't Have a Chance (Not A Chance in H*ll)*



- "When an agency claims to discover in a long-extant statute an unheralded power to regulate 'a significant portion of the American economy,' … we typically greet its announcement with a measure of skepticism. We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast 'economic and political significance.' " *UARG v. EPA,* No. 12-1146, slip op. at 19 (U.S. June 23, 2014).
- "We acknowledge the potential for greenhouse-gas BACT to lead to an unreasonable and unanticipated degree of regulation, and our decision should not be taken as an endorsement of all aspects of EPA's current approach, nor as a free rein for any future regulatory application of BACT in this distinct context." *Id.* at 28.

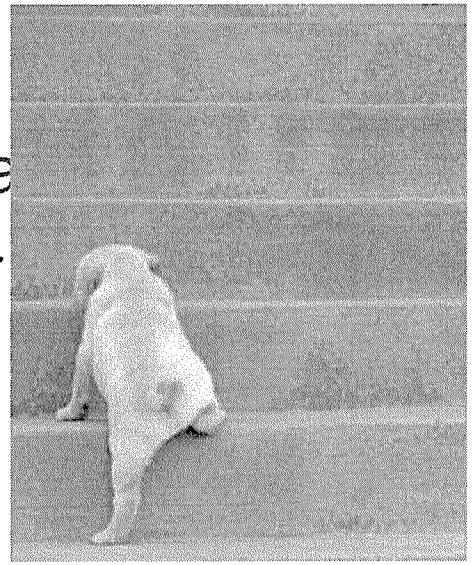
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Why Issue a Legally Vulnerable Rule? – *Opportunity Doesn't Knock Twice; You Have To Start Somewhere*

- The 2010 Settlement Agreement
  - CO_2 Standards for new and existing power plants by May 2012
  - CO_2 Standards for new and existing refineries by November 2012
- The Obama Legacy – June 2013 Climate Action Plan
- The U.S.- China Agreement
- The Paris Conference

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One Step At A Time



- Final Rule – Late Summer or Early Fa
- Proposed Federal Plan – Before year
- Final Federal Plan – Year end 2016
- State Plans due – Fall 2016, 2017, or 2018 (for multi-state plans)
- Approval or Disapproval of 49 state plans
- Proposed Federal Plans for States that are not participating in CCP or those with disapproved plans
- Final Federal Plans

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Possible Federal Plan – *Life is A Box of Chocolates; You Never Know What You Are Going to Get*

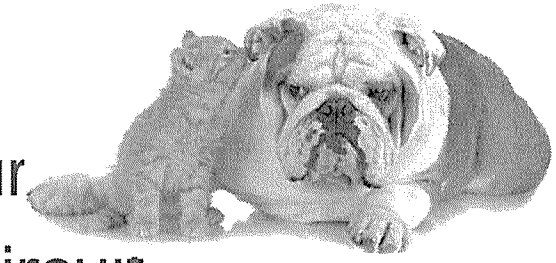
- CO2 Trading Program
- Applicable to Sources; not States
- Mirror of NRDC Proposal
- Credit smokestacks with beyond fence-line activities
- Enforceability Issues



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Litigation – ***Fighting Like Cats and Dogs***

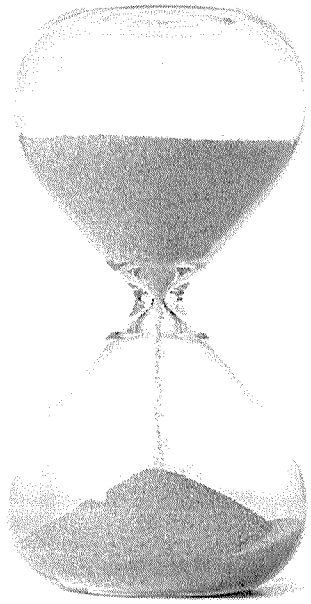
- Petitions to Stay the Rule Pending Review – DC Circuit and perhaps Supreme Court
- Challenge to CPP– DC Circuit
- Challenge to CPP – Supreme Court
- Challenge to Federal Plan – DC Circuit
- Challenge to Federal Plan – Supreme Court
- Challenges to State and Federal Plans – State courts and every U.S. Court of Appeals?



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Timing of Key Legal Challenges – *Time Will Tell*

- DC Circuit Decision on Stay: late 2015 - early 2016
- Possible Supreme Court Decision on Stay: early - mid 2016
- DC Circuit Decision on CPP – late 2016 - early 2017
- Supreme Court Decision on CPP – Late 2017 - early 2018



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At the End of the Day



- Highly Unlikely to be Implemente
  - Political and Practical Reasons
  - Legal Reasons
- Final rule will be quite different from proposal
- If implemented, won't be on proposed schedule
- Only enforcement mechanism against a State is a federal plan
- This is not the end of GHG regulation – ***The Ship Has Sailed***

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Richard Alonso advises manufacturers and energy companies on environmental, permitting, compliance and enforcement issues before state and federal agencies.

His practice focuses on Clean Air Act issues such as complex New Source Review applicability and permitting, mobile source regulations, EPA rulemaking efforts, legal challenges to EPA actions, and Clean Air Act enforcement defense and compliance counseling.



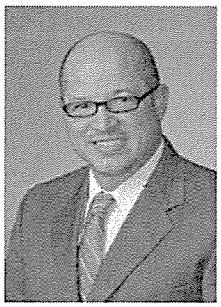
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Sandra Snyder represents refiners, natural gas exploration and production companies, manufacturers, industry trade associations, and other energy companies in environmental litigation in state and federal courts, as well as before regulatory agencies.

Her prior work experience as a chemical engineer at one of the world's largest energy companies provides her with an inside understanding of her clients' concerns, including the interplay between environmental compliance and business planning considerations, as well as maintenance, safety, and equipment issues.



RICHARD ALONSO

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Richard Alonso is a partner in the firm's Environmental Strategies Group in its Washington, D.C. office. He advises manufacturers and energy companies on environmental, permitting, compliance and enforcement issues before state and federal agencies. His practice focuses on Clean Air Act issues such as complex New Source Review applicability and permitting, mobile source regulations, EPA rulemaking efforts, legal challenges to EPA actions, and Clean Air Act enforcement defense and compliance counseling. He also advises companies on multi-media enforcement matters, include Clean Water Act compliance issues.

Mr. Alonso's environmental enforcement defense docket include cases with EPA, States, and national environmental groups. He is called upon by various industrial clients for his knowledge of EPA federal enforcement and how EPA's enforcement office interacts with the rest of the Agency and with national environmental groups.

Before joining Bracewell, Mr. Alonso was the Chief of the Stationary Source Enforcement Branch at the U.S. Environmental Protection Agency's Office of Enforcement and Compliance Assurance. In this capacity, he was EPA's second-ranking official for Clean Air Act enforcement. As the national program manager of the stationary source enforcement program under the Clean Air Act, he worked with the U.S. Department of Justice, EPA Regional offices, and States to develop enforcement policies and priorities through guidance, rulemakings, settlements and litigation. He has nearly 10 years of service with EPA's enforcement office, principally with the Clean Air Act, Clean Water Act, and Safe Drinking Water Act programs. He managed and negotiated Clean Air Act enforcement cases involving issues of national significance representing billions of dollars in injunctive relief, including the New Source Review coal-fired power plant enforcement initiative.

27th Annual Environmental Superconference

August 6 – 7, 2015

Austin, Texas

Texas: A Case Study in the Clean Power Plan's Disparate Impact on States

By
Michael J. Nasi, Jacob P. Arechiga, and Mark L. Walters, Jackson Walker, L.L.P.

The U.S. Environmental Protection Agency (EPA) has announced its intention to finalize its so-called "Clean Power Plan" (CPP or Proposed Rule) by August 2015.[1] Part of President Barack Obama's Climate Action Plan,[2] the rule, once finalized, is intended to limit the emissions of carbon dioxide (CO_2) from the country's existing fossil-fueled electric generation sources and is potentially the most transformative rule to impact fossil-fueled electric generation ever proposed. So controversial, EPA has received over 4.3 million comments.

Rather than addressing the full scope and controversy surrounding the Proposed Rule this paper's focus is limited to a brief discussion of the rule design and its legal and technical challenges, followed by a more detailed discussion of the disparate impact that the Proposed Rule has on Texas and Texas coal-fired electric generation compared to other states and the potential electric reliability and affordability concerns in Texas resulting from these impacts. This paper concludes with an assessment of the expected legal case(s) that will be brought against the CPP, when finalized, and discusses how recent Supreme Court cases signal how our highest court might view the CPP if finalized with the same rule design as the Proposed Rule.

It is important to note that this paper was drafted to meet a deadline prior to the release of the final rule. It is anticipated that the final rule will be released in pre-publication form[3] by the time of the conference and release of this paper. Attention should be paid to the live remarks and presentation slides that focus on changes made to the rule between proposal and finalization.

I. Rule Design: "Outside of the Fence" Strategies and Limitations

The CPP is structured around statewide CO_2 emission budgets derived by EPA and handed down to the states as mandatory, fleet-wide rates that must be achieved by states under plans of their

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[1] U.S. EPA, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34830 (June 18, 2014).
[2] Executive Office of the President, *The President's Climate Action Plan* (June 2013).
[3] Pre-publication versions of rules are released prior to formal publication in the *Federal Register*. These publications provide the content of the rule and, historically, are only revised for minor non-substantive changes (e.g. grammar and spelling corrections) once published. Effective dates and other timing and substantive requirements only begin to run once published in the *Federal Register*.

own making. Each state has a unique and specific limit, based on the methodology discussed below. EPA has proposed a rolling implementation schedule, where an "interim goal" must be met, on average, from 2020-2029. By 2030, each state must comply with the "final goal." Under the proposed rule, the interim goals have often been referred to as the "2020 cliff" because the vast majority of reductions in the rule must be met during this interim period.

In order to establish these state-wide emissions limits, EPA – with certain modeling assumptions and criteria[4] – added up all of the CO_2 emissions from each state's electric generators and then divided that number by the megawatt hours of electricity produced. EPA then took that number and established the interim and final goals through the application of a novel interpretation of "best system of emissions reduction" (BSER).

EPA's methodology for establishing BSER, and ultimately state-wide CO_2 emissions limits, is based on a four "building block" model assuming significant increases in efficiencies at coal plants (Block 1), forced fuel-switching from coal-to-gas (Block 2), accounting for nuclear and assuming a significant increase in renewable generation (Block 3), and an assumed expansion of energy efficiency programs that will result in a nearly 10% reduction in demand nationwide (Block 4).

EPA claims that this multi-block approach provides flexibility to the states; states can choose to rely on one block more than another in order to meet their ultimate compliance limit. Given the strenuousness of the limits and the compressed timeline to comply, there is actually very little flexibility. It is much like telling an individual that they may use numerous ways to travel from Los Angeles to New York (e.g. car, train, plane), but only providing that individual 6 hours to make the trip. The reality of how much must be done in so short a period of time vastly limits the "flexibility" of states.

In order to ultimately meet the CO_2 emissions limits resulting from this BSER model, many states will be left with no option but to impose the limitations modeled by EPA when they derived the state's budget. This includes significantly relying each of the BSER building blocks, especially Blocks 2, 3, and 4. For example, EPA imposes on Texas a 2020 emission rate of 853 pounds of CO_2 emitted per megawatt-hour of electricity produced (lbs/MWh). This is a 33.6% reduction off the EPA-selected and calculated 2012 baseline for Texas of 1,284 lbs/MWh.[5] The final goal for Texas is 791 lbs/MWh [a 38.4% reduction from the 2012 baseline].[6] As discussed in more detail below, the timing stringency of the Texas budget and assumptions built into its derived emissions goal functionally mandate massive curtailment of coal-fired generation and unprecedented expansion of renewable energy resources.

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[4] *See* footnote no. 4, supra.

[5] This 2012 modeled total, according to EPA, "includes all generation subject to the state goals for which data was reported in 2012. That data includes generation from covered fossil fuel-fired units (e.g., >25 MW), all RE generation except hydropower, and approximately 5.8% of nuclear generation (the "at-risk" component of nuclear generation)." *See* U.S. Environmental Protection Agency, Office of Air and Radiation, Goal Computation Technical Support Document (TSD) for the CAA Section 111(d) Emission Guidelines for Existing Power Plants, Docket ID No. EPA-HQ-OAR-2013-0602, 27 (June 2014).

[6] *Id.* at 22.

The Blocks 2 through 4 methods are generally referred to as "outside the fence" strategies – strategies that do not involve the installation of carbon mitigation technologies inside the fence of gas- or coal-fired power plants, but rather serve as complete fuel/technology alternatives to such plants. The legality of such an outside-the-fence plan is in serious question but will not be covered in detail by this paper. Suffice it to say that many experienced Clean Air Act practitioners agree that imposing emissions limitations based on outside-the-fence criteria is far beyond powers granted to EPA by Congress in the Clean Air Act and will ultimately be struck down by the courts.

The following section quickly outlines the practical limitations of the Blocks 2 and 3 "outside the fence" strategies. Block 4 strategies, which could include items such as the installation of "smart meters," incentivized replacement of old air conditioning units, and other end-user methods are not addressed but face similar legal challenges in the near term.

A. Block 2 (Coal – Gas Fuel Switching)

Aside from lifecycle emissions, natural gas combined cycle (NGCC) power plants generally emit half of the carbon emissions per unit of output of traditional coal-fired plants. Because of this, some have advocated for "fuel switching" from coal to gas. Some who refer to coal-to-gas fuel switching strategies are referring to the repowering of existing coal-fired boilers with natural gas, but this was not the focus of Block 2 (EPA did not emphasize this strategy in the proposed CPP, but solicited comment on it when it issued a Notice of Data Availability (NODA) regarding the CPP).[7] Rather, the discussion here is on what EPA relied upon for the vast majority of its Block 2 reductions - down-dispatching coal units in direct correlation to the increase of the capacity factor of NGCC units.

EPA's fundamental assumption in Block 2 is that all existing NGCC units will be able to achieve an operating capacity factor of 70%. Yet, the average capacity factor for NGCC units nationwide is in the 35-50% range. This disparity, as well as the infrastructure assumptions and other challenges associated with a nationwide NGCC 70% capacity factor, garnered significant attention during the comment period.

B. Block 3 (Nuclear and Renewables)

1. Nuclear

EPA has built into its BSER model an assumption that 5.8% of the historical nuclear generation currently at risk of retirement will, instead, remain in operation. EPA also assumes that all nuclear electric generating units currently under construction will be completed and operated.[8] In developing state goals, EPA has included nuclear capacity as zero emitting generation. EPA notes that "[n]uclear is not considered a 'dispatchable' resource as is NGCC capacity…[I]ts utilization will remain fairly constant…due to both its low variable operating cost relative to fossil sources and technical limitations regarding start-up and shut-down times."[9] Therefore, in

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[7] *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Notice of Data Availability, 79 Fed. Reg. 64543 (Oct. 30, 2014).
[8] This includes: Watts Bar 2 in Tennessee, Vogtle 3–4 in Georgia, and Summer 2– 3 in South Carolina.
[9] Goal Computation Technical Support Document at 14.

the model, "[e]xisting nuclear is not assumed to increase generation in the same manner as the NGCC fleet is assumed capable of....[T]he expected generation for new and "at risk" nuclear is simply added to the state goal denominator – resulting in a lower state goal emission rate."[10]

2. Renewable Displacement of Fossil Fuel-Fired Plants

In the renewable energy component of Block 3, EPA has divided the nation into regions. EPA then took an average of the renewable portfolio standards (RPS) for states within that region. States are then expected to be able to meet that average renewable target to those states.[11]

States are grouped by region based solely on geographic proximity. EPA does not assess whether these states share the same renewable generation resource capabilities or the markets for such capabilities. Further, these regions do not consider the size of states' economies or electricity markets, or the amount of existing installed renewable capacity.

EPA's model assumes that renewable generation can be constructed and placed into the electric grid with little perceived complications or impediments; there is also little consideration of the transmission constraints entailed in expanding renewable generation. In many states, renewable generation is not located near population centers; the best wind and sun resources are often far from population centers. Significant transmission capacity is required to reach these areas. The CPP does not currently factor in the time for constructing new transmission facilities or other impediments to having resources online by the time the CPP's compliance obligations go into effect.

C. Block 4 (Demand-Side Reductions)

As noted from the outset, the Block 4 demand-side management assumptions of EPA's budget derivation will not be addressed here. However, they present a host of additional legal questions related to EPA's authority to rely upon such projected reductions in deriving emission guidelines, not to mention enforcement questions if EPA has any intentions of enforcing demand-side reductions on states (through either SIP disapproval or FIP imposition).

II. Disparate Impact of EPA's Clean Power Plan to Texas

This section of the paper shifts from the CPP's basic rule design and general 4-block state emission budget derivation process to the more specific question of how EPA's budget-derivation process can generate arbitrary results and impose disparate impacts on individual states. Texas is perhaps the best example of how this is the case. EPA's BSER model requires Texas to make CO_2 emissions reductions and bear compliance costs far beyond those of any other individual states and far greater than Texas' proportionate share of power generation or contribution to the nation's EGU CO_2 emissions. EPA's expected emissions reductions for Texas, and projected costs and impacts associated with those reductions, are staggering. As stated above, Texas' 2012 CO_2 emissions rate, as calculated for the purposes of the rulemaking,

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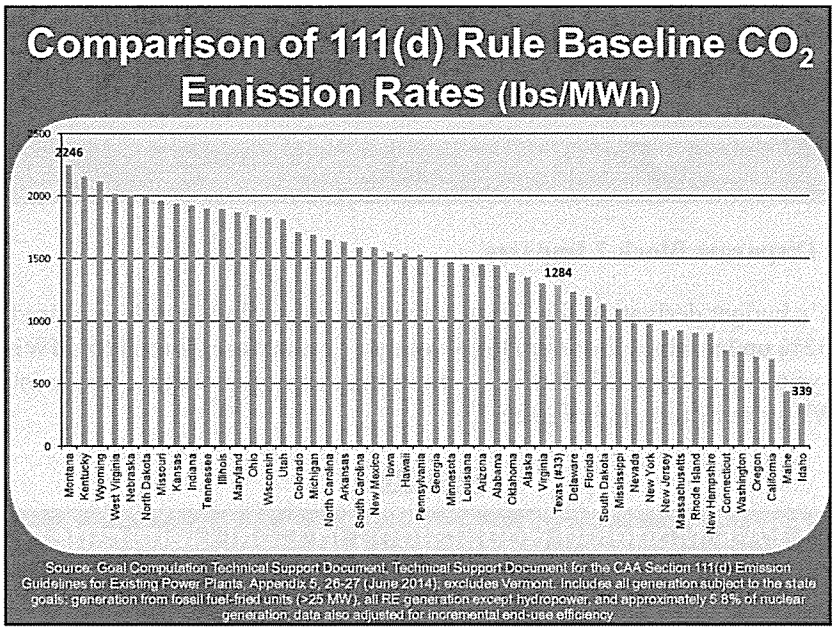
[10] *Id.*

[11] U.S. EPA, GHG Abatement Measures, Technical Support Document (TSD) for Carbon Pollution Guidelines for Existing Power Plants: Emission Guidelines for Greenhouse Gas Emissions from Existing Stationary Sources: Electric Utility Generating Units, 4-1 – 4-2 (June 10, 2014).

is 1,284 lbs/MWh-yr. With this total, Texas has a lower emissions rate than 32 other states, far below the median state.[12] (*see* Figure 1). It is anticipated that Texas will have to reduce its overall CO_2 emissions by 38.4% by 2030 under EPA's plan to meet the final emissions target of 791 lbs/MWh-yr.[13]

In terms of total reduction, Texas' reduction far outpaces every other state in the country, with Texas shouldering roughly 18% of the entire country's CO_2 reductions and nearly three times as much as the next state – Florida.[14] (*see* Figure 2). This is despite having an emissions rate far less than the median state and generating only roughly 11% of the country's electricity.[15] Further, a significant component of these reductions will effectively have to be accomplished by the 2020 deadline.

FIGURE 1



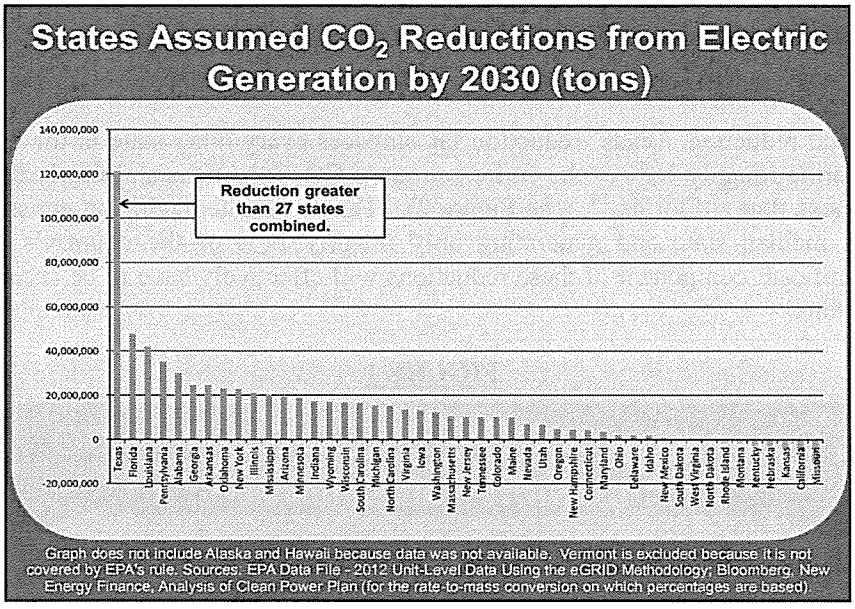
[12] Goal Computation Technical Support Document at 26-27.

[13] Others have estimated that due conversion from rate to mass and other factors, this effect may even be larger. Bloomberg, New Energy Finance estimated that Texas would have to reduce its emissions by 42%. *See* Bloomberg, New Energy Finance, Analysis of Clean Power Plan.

[14] U.S. EPA, Data File - 2012 Unit-Level Data Using the eGRID Methodology; Bloomberg, New Energy Finance, Analysis of Clean Power Plan.

[15] *See* U.S. EPA Data File – 2012 Unit-Level Data Using the eGRID Methodology.

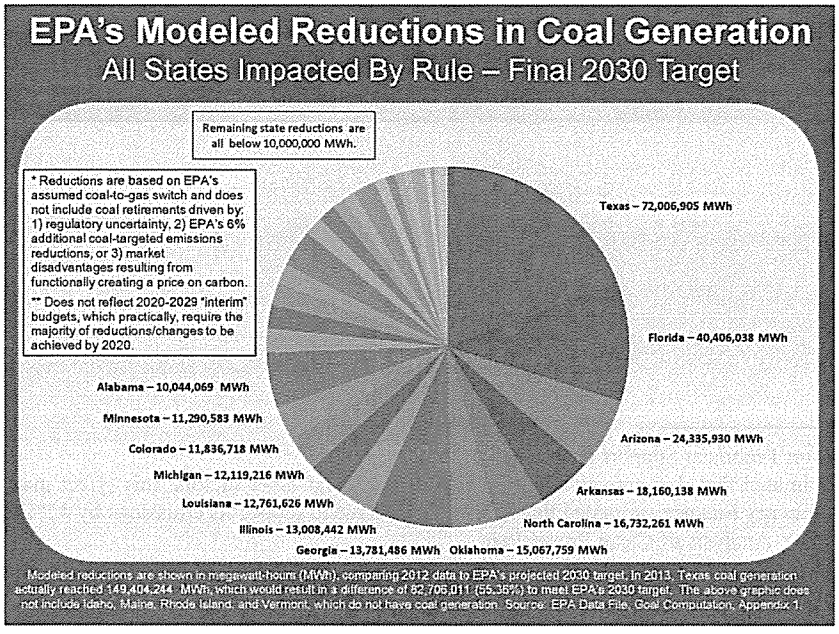
FIGURE 2



A. Disparate Block 2 Impacts

Built into EPA's budget derivation for Texas is the assumed reduction of coal-fired generation of electricity by 52% under Block 2 of the BSER model. This is over 72 million MWh-yr (from 139 million MWh-yr to 67 million MWh-yr), far more than any other state; Florida is second with a 40 million MWh-yr reduction. (*see* Figure 3).

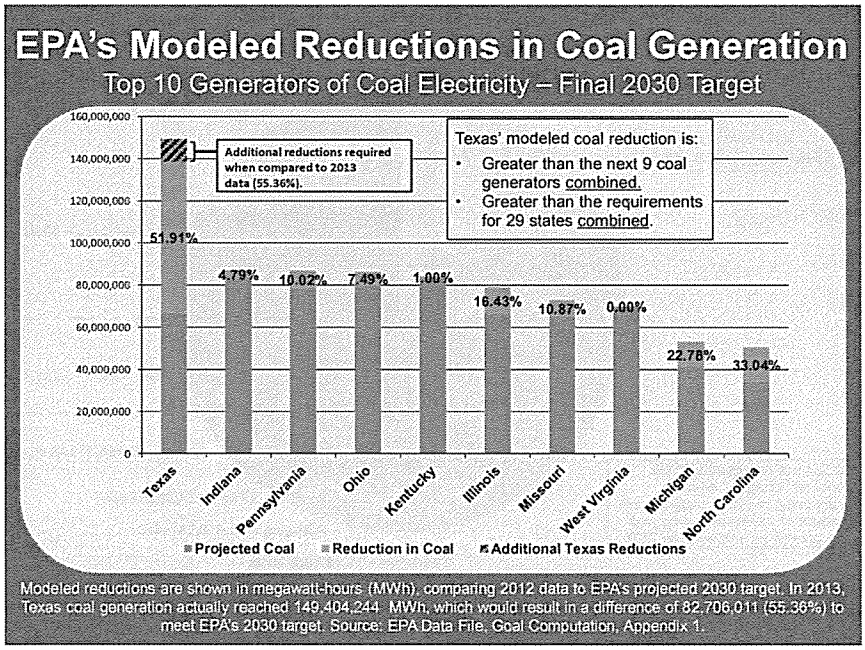
FIGURE 3



EPA's own modeling predicts that by 2020, the budget imposed on Texas will force the retirement of at least 12,788 MW of coal generation, in addition to nearly 3,500 MW of natural gas generation.[16] Amazingly, EPA's budget derivation process assumes that many other states who rely heavily on coal will not reduce coal-fired generation at all (or by a very small percentage). In fact, EPA's assumed reduction in Texas coal-fired generation is more than the next 9 coal-fired generation states combined. (*see* Figure 4). This raises serious questions about the efficacy of the rule given that the Texas coal-fired fleet is by far the youngest coal-fired fleet, which has been heavily retrofitted with control technology at great cost resulting in one of the cleanest coal-fired fleets in the country

Texas power generators have installed more than $17.4 billion present-day dollars in state-of-the-art environmental controls,[17] and Texas' coal-fueled power plants have reduced PM-related emissions by 43 percent and emissions of nitrogen oxides by 55 percent since 1999.[18] The Texas coal fleet also has one of the lowest NOx emissions rate of any coal fleet in the nation, far lower than the national average.[19]

FIGURE 4



[16] *See* EPA IPM, Base Case Unit Retirements, 2020. Oklaunion's projected retirement date begins in 2020 but may extend to 2025. The period in which the capacity was retired was determined by identifying the units in two IPM files found at http://www.epa.gov/airmarkets/powersectormodeling/cleanpowerplan.html: Proposed Clean Power Plan_Base Case_rpe file and Proposed Clean Power Plan_Option 1_rpe file.

[17] Based on emission control online date, cost and type data from U.S. EPA IPM v4.10 Documentation and U.S. EPA National Electric Energy Data System (NEEDS). Costs do not reflect actual installation costs, but rather, are based on estimated costs found in EPA's IPM modelling database. Costs revised to reflect inflation.

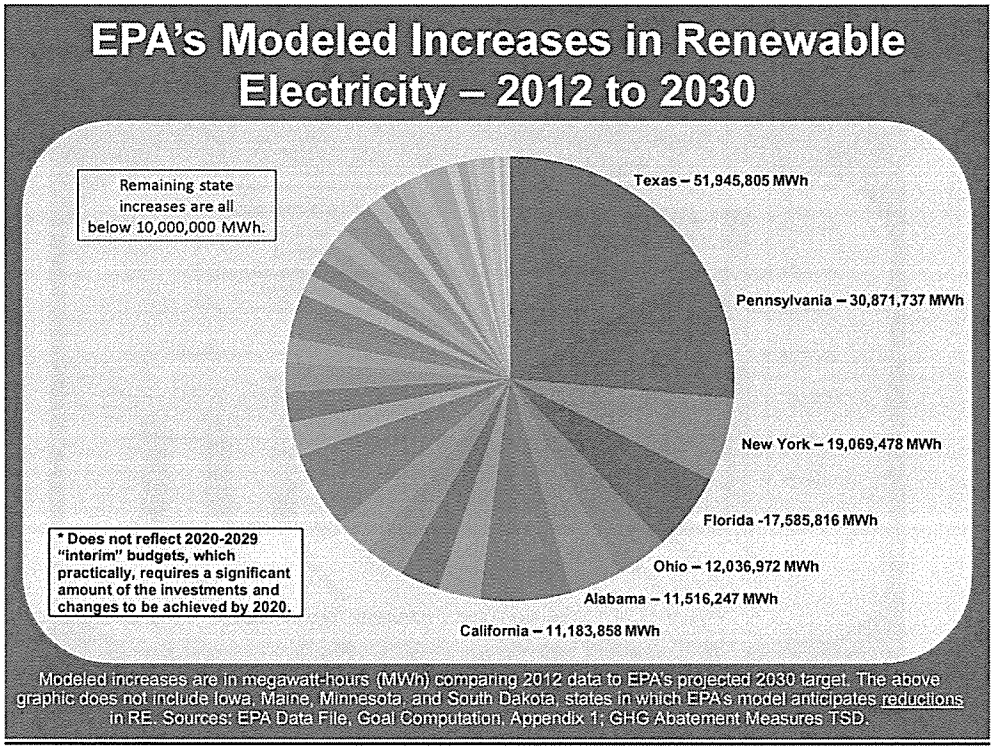
[18] ACCCE, Clean Coal Technologies Are Improving Air Quality in Texas (June 2013).

[19] Based on emissions rate and heat input from U.S. EPA, Clean Air Markets – Data and Maps (2013) (includes only operating electric utility units) and capacity data from EIA-860 database (2012). States with "coal fleets" are considered those with a total capacity of greater than 2,200 MW.

B. Disparate Block 3 Impacts

The disparities of EPA's budget-derivation process by no means end at Block 2. No state has assumed a greater burden in EPA's calculations than Texas under Block 3. Currently, Texas has significantly more renewable generation than any other state. The renewable generation component of Texas' generation mix took over four decades to develop into its current capacity; it was heavily subsidized by the federal government and facilitated by both a state renewable energy portfolio standard and an unprecedented investment in renewable energy-focused transmission infrastructure (e.g. the Competitive Renewable Energy Zone (CREZ) build out).[20] The proposed CPP assumes, without duly crediting past achievements or sufficiently considering current economics or potential grid stability, that renewable generation in Texas will increase by 153% (51,946,805 MWh) in just 8-14 years (from the current ~34 million MWh-yr to 86 million MWh-yr -- a difference of 52 million MWh-yr).[21] (*see* Figure 5).

FIGURE 5



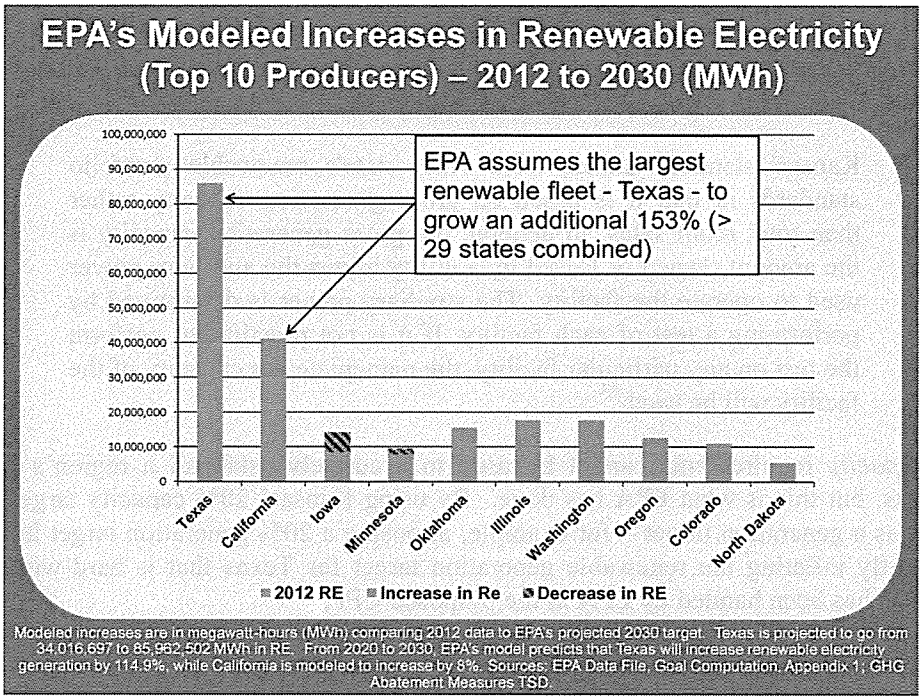
Texas' expected increase is much higher than the 2nd highest generator of renewable electricity, California, which is assumed to increase by just 37% (Figure 6).

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[20] Susan Combs, Texas Comptroller of Public Accounts, Texas Power Challenge: Getting the Most from Your Energy Dollars, 14 (September 23, 2014).

[21] *See* GHG Abatement Measures TSD at 4-6 – 4-7; *see also* EPA Data File, Goal Computation, Appendix 1.

FIGURE 6



Regarding the use of Kansas' RPS as the model for the entire South Central region, it is particularly harmful to Texas. The electric market of Kansas is extremely different than Texas'. As an initial matter, Kansas is much smaller than Texas without nearly the amount of electricity-intensive industry. Texas' total electricity generation in 2012 was nearly ten times greater than Kansas' total electricity generation.[22] Texas' renewable generation was 34,016,697 MWh in 2012, while Kansas' was only 5,252,653 MWh.[23] In order for Texas to reach the renewable target, it will therefore have to install roughly 10 times the amount of renewable energy that Kansas will have to install under the CPP. This makes a 20% renewable target, practically speaking, much easier for Kansas to meet over Texas.

An additional flaw in EPA's reliance upon the Kansas RPS as a budget-derivation assumption is the lack of recognition that the Kansas RPS provides numerous exceptions and provisions not contemplated in the CPP that mitigate the ultimate impact and burden of the RPS. These exceptions and provisions are not built into EPA's mandatory state budgets that are based on the imposition of a 20% RPS. For example, Kansas' RPS excuses generators from paying a penalty under the law if the RPS would cause the "affected utility's total revenue requirement to increase one percent or greater."[24] Though Kansas sets the RPS at a very aggressive goal, this provision serves as a backstop that the harm cannot be too great on Kansas' electricity consumers. This

[22] U.S. EPA Data File - 2012 Unit-Level Data Using the eGRID Methodology. Kansas' total electric generation was 44,156,459 MWh; Texas' total electric generation was 428,867,719 MWh.
[23] GHG Abatement Measures TSD at 4-6 – 4-7.
[24] *See* KAN. STAT. ANN. § at §§ 66-1260(a) & 66-1261(b).

type of backstop is not contemplated in the CPP, and makes the aggressive Kansas RPS an inappropriate measure for other states.

Kansas itself has identified its RPS standards as a unique example; one that should not serve as a model for other states. As noted by the Kansas Corporation Commission:

> Kansas' standard differs from other state's renewable portfolio standards in that it is based on gross generation capacity rather than total retail sales. In general, the gross generation capacity is the amount owned or leased by a utility minus the auxiliary power used to operate the facility. The auxiliary power is determined by performing a test of each facility. If it is not practical to perform the test on any particular facility, the nameplate net capacity of the facility will be used.[25]

Kansas' *capacity* requirements cannot be used to accurately establish a region's *generation* requirements, but this is what EPA has done. By using Kansas' 20% capacity target, and then applying it as a generation target – for example, imposing a 20% generation target in Texas – it is significantly inflating the renewable generation target for Texas that is hard-wired into the budget Texas has been handed by EPA in the proposed CPP.

III. Reliability Impacts of EPA's Clean Power Plan

Stepping back from the disparity of the budget-derivation process for Texas to the projected impacts of the Texas budget, it is safe to say that the consequences of disparity will be significant and could be dramatic. Based on the information submitted into the administrative record in the CPP rulemaking, there will not be sufficient new generation (or reductions in demand), particularly under the time constraints of the proposed CPP, to make up for the retirements that are projected to be forced by the aggressive interim and final budgets for Texas. What follows is a brief description of some key studies that have been submitted to EPA for consideration which reflect nationwide concerns, as well as acute issues in two specific markets – the Southwest Power Pool (SPP) and the Electric Reliability Council of Texas (ERCOT). The North American Electric Reliability Corporation's (NERC) analysis of the CPP's impact on the ERCOT region is also discussed.

A. SPP predicts significant reliability impacts from the CPP.

SPP is a regional transmission organization that oversees parts of Texas, Oklahoma, and a number of other states' electricity production and distribution. SPP conducted an analysis of the impacts of the CPP on the SPP and reached three primary conclusions: 1) the Clean Power Plan will impact reliability of the bulk electric system; 2) the timing proposed by EPA for compliance

[25] *See* Energy Division, Kansas Renewable Energy Standard (Res). Available at: http://kcc.ks.gov/energy/res.htm. (Last accessed Nov. 20, 2014).

is infeasible; and 3) the Clean Power Plan will have material impacts on the market-based dispatch of electric generating units within the SPP region.[26]

EPA's projected retirements represent approximately 6,000 MW of capacity to be retired in the SPP region, beyond those currently expected by 2020; this is a 200% increase over SPP's current expectations.[27] This will result in "serious, detrimental impacts on the reliable operation of the bulk electric system in the SPP region, introducing the very real possibility of rolling blackouts or cascading outages that will have significant impacts on human health, public safety and economic activity within the region."[28]

SPP's total generation capacity will be 4,600 MW deficient by 2020 and 10,100 MW in 2024, resulting in a reserve margin of 4.7% by 2020, 8.9% lower than SPP's minimum reserve margin.[29] This would be a violation of SPP's reliability criteria and NERC reliability standards. Nine of fourteen load-serving members would be deficient in 2020. Further, SPP's anticipated reserve margin would fall to -4.0% by 2024.[30] SPP concluded that the proposed Clean Power Plan "will impede reliable operation of the electric transmission grid in the SPP region, resulting in violations of NERC's mandatory reliability standards and exposing the power grid to significant interruption or loss of load."[31]

Projected shortfalls will result in "numerous thermal overloads and low voltage occurrences," and that if assumed generation retirements were to occur absent requisite transmission and generation infrastructure improvements, "the power grid would suffer extreme reactive deficiencies...that would expose it to widespread reliability risks resulting in significant loss of load and violations of NERC reliability standards."[32] SPP added that "even with generation capacity added to replace the assumed EGU retirements, additional transmission infrastructure will be needed to maintain reliable operation of the grid. This assessment revealed 38 overloaded elements that SPP would be required to mitigate with transmission planning solutions....Portions of the system in the Texas panhandle, western Kansas, and northern Arkansas were so severely overloaded that cascading outages and voltage collapse would occur and would result in violations of NERC reliability standards."[33]

SPP also noted that "the timing associated with Clean Power Plan compliance is problematic at best," which is a result of EPA's failure to consider "the cost [or] the time required to plan and construct electric transmission facilities."[34] In the SPP region, as "much as eight and a half years to study, plan for and construct new transmission facilities has been required."[35]

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[26] *See* Southwest Power Pool, Comment on EPA's Clean Power Plan (Oct. 9, 2014), referencing SPP's reliability Impact of the EPA's Proposed Clean Power Plan.
[27] *Id.* at 2.
[28] *Id.* at 4.
[29] *Id.* at 7.
[30] *Id.*
[31] *Id.*
[32] *Id.* at 4.
[33] *Id.* at 5-6.
[34] *Id.* at 8.
[35] *Id.*

B. ERCOT predicts significant reliability impacts from the CPP.

ERCOT is designated by NERC as the Reliability Coordinator, the Balancing Authority, and as a Transmission Operator for the ERCOT region; ERCOT is also registered for several other functions, including the Planning Authority function.[36] ERCOT oversees roughly 90% of the Texas electricity load and over 24 million consumers.[37] In November of 2014, it released an initial analysis of the impacts of EPA's CPP. ERCOT ran various models of the potential impacts of the CPP and found that the CO_2 emissions limitations associated with the CPP:

> will result in the retirement of between 3,300 MW and 8,700 MW of coal generation capacity, could result in transmission reliability issues due to the loss of generation resources in and around major urban centers, and will strain ERCOT's ability to integrate new intermittent renewable generation resources. The Clean Power Plan will also result in increased energy costs for consumers in the ERCOT region by up to 20% in 2020, without accounting for the costs of transmission upgrades, procurement of additional ancillary services, energy efficiency investments, capital costs of new capacity, and other costs associated with the retirement or decreased operation of coal-fired capacity in ERCOT. This summary report describes the results of ERCOT's analyses.[38]

ERCOT found that the accelerated retirement and suspended operation of coal EGUs pose particular challenges to maintaining reliability within ERCOT.[39] This is because "[c]oal resources provide essential reliability services, including reactive power and voltage support, inertial support, frequency response, and ramping capability."[40] There is also the potential for voltage/reactive power control issues that can only be mitigated by those resources, which requires additional reliability studies.[41]

ERCOT notes that natural gas generation may not be as available as anticipated in the CPP, to make up for EPA-imposed generation shortfalls. For instance, "ERCOT estimates that an additional 1,500 to 4,500 MW of natural gas steam capacity may be at risk of retirement based on low net revenues in the model results combined with the need to comply with the 316(b) rule, CSAPR, and other environmental regulations."[42] This may be further complicated with ensuring adequate natural gas supply, as demand for natural gas will increase under the requirements of the CPP.[43]

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[36] Electric Reliability Council of Texas, ERCOT Analysis of the Impacts of the Clean Power Plan, 1 (November 17, 2014).
[37] Electric Reliability Council of Texas, Quick Facts, January 2015.
[38] ERCOT Analysis of the Impacts of the Clean Power Plant at 1.
[39] *Id.* at 10.
[40] *Id.*
[41] *Id.*
[42] *Id.*
[43] *Id.*

ERCOT also found that reliability impacts may occur much sooner than 2020. Electric generating companies do not plan for compliance within a vacuum. This planning is being done years in advance and considering various market and regulatory factors. ERCOT found that:

> owners of generation resources in Texas may choose to retire units early rather than install control technology retrofits for compliance with the Mercury and Air Toxics Standard (MATS), the Regional Haze Program, or the 316(b) Cooling Water Intake Structures rule. For example, the compliance date for the MATS rule is April 2015, but several coal-fired units in Texas have received a one-year compliance extension from the Texas Commission on Environmental Quality (TCEQ). The pending market impacts due to the Clean Power Plan could result in resource owners deciding to retire these units rather than invest in the retrofit technology required to achieve compliance with MATS. Similarly, it is anticipated that EPA will issue a Federal Implementation Plan (FIP) for Texas for the Regional Haze program in the coming weeks. Depending on the FIP requirements, generators may need to make similar decisions about whether to make significant investments in control technology retrofits or instead retire their units, in light of eventual compliance with the Clean Power Plan. With earlier retirements of fossil fuel-fired capacity, ERCOT could experience the aforementioned grid reliability challenges well before the Clean Power Plan's first compliance date in 2020.[44]

In addition to retirements, integrating greater loads of renewable generation will present reliability difficulties due to the intermittent nature of electric generation. This is particularly true during the ramping periods of renewable generation.[45] There will also be difficulties associated with the current transmission infrastructure being modified and adapted to transmit future energy supplies. ERCOT predicts that "[a] significant amount of transmission system improvements would likely be required to ensure transmission system reliability criteria are met even if a moderate amount of coal-fired and gas steam resources were to be displaced."[46]

C. NERC predicts significant electric shortfalls from the CPP in the ERCOT region.

NERC anticipates that the ERCOT region (along with the SPP region) will suffer some of the greatest forced resource retirements under the CPP.[47] By 2020, NERC anticipates that Texas will have a reserve margin of negative 4.8%.[48] ERCOT's historic minimum target reserve margin is 13.75%; this is also the Reference Margin Level that NERC has assigned to Texas.

This reserve margin is, essentially, a buffer. It is used as a measure to ensure that the electric grid can remain operational during episodes of peak demand; for example, a series of unexpectedly hot summer days (i.e. Texas' summer of 2011). Affecting a negative reserve

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[44] *Id.* at 10-11.
[45] *See id.* at 11-13.
[46] *Id.* at 14.
[47] North American Electric Reliability Corporation, Potential Reliability Impacts of EPA's Proposed Clean Power Plan, Phase I, vii (April 2015).
[48] *Id.* at 25.

margin would create dire risks to electric reliability. NERC does not expect that any other region will have as significant an impact to its reserve margin; only one other region is expected to have a negative reserve margin.[49]

IV. What does the future hold from a legal perspective?

Turning from what EPA has proposed in the CPP to what the courts may have to say about it, this section sets out the basic legal challenges that will be in play in the coming months and years and some projections about how they might turn out given recent Supreme Court cases on related principles. To be clear, the CPP has already been legally attacked, albeit under a novel theory which sought legal relief far before the courts are normally disposed to act upon regulations. This early challenge was brought by Murray Energy, West Virginia, and others.[50] The challenge brought by Murray Energy and West Virginia was premised on a single argument: that EPA was precluded from regulating power plants under CAA § 111—regardless of the substantive content of the rule—because power plants are regulated under § 112. The D.C. Circuit did not reject this argument, it merely held that the challenge was premature because no final agency action had yet occurred.

Subsequently, in *Michigan v. EPA*[51]—the MATS case—the Supreme Court rejected EPA's argument that it could not consider costs in deciding whether to regulate power plants under § 112. The case has been remanded to the D.C. Circuit. If MATS is vacated or suspended pending further review by EPA then, arguably, power plants are no longer being regulated under § 112, at least for the time being. If, however, the D.C. Circuit remands the rule to EPA without vacating it, as seems to be happening more and more frequently, then power plants would still be regulated under § 112, notwithstanding the Supreme Court's decision in *Michigan*.

Additionally, once a final CPP rule is issued, new arguments come into play, including whether EPA has any authority to regulate "outside the fence line" under § 111, whether "don't use coal" is a "system" of emissions reduction, whether a state can be a "source" of emissions, and whether EPA can promulgate existing source performance standards under § 111(d) that bear little relationship to the new source performance standards under § 111(b), especially when, as a practical matter, to comply with § 111(d), emission standards for existing coal plants would have to be lower than those for new plants, even though 111(b) is supposed to be a technology-forcing provision, prodding new sources to adopt the latest and best emissions reductions equipment.

Additionally, although in *Utility Air Regulatory Group v. EPA*[52] the Supreme Court affirmed EPA's ability to regulate greenhouse gas emissions from "anyway" sources—"major emitting sources" of pollution that were already subject to the Clean Air Act's "prevention of significant deterioration" requirements because of their emission of other—"conventional"—pollutants—the majority's opinion refutes the notion that EPA can make broad national policy under the guise of regulating air pollution under the CAA. The CPP will test whether EPA can, without

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[49] *Id.*

[50] *In re: Murray Energy Corporation*, consolidated with *State of West Virginia, et al. v. EPA, City of New York, et al.*

[51] No. 14-46 (U.S. June 29, 2015).

[52] 134 S. Ct. 2427 (2014).

ordering any specific regulation, set emission standards that cannot be met without a fundamental reworking of the nation's power market.

The most important case on this issue may turn out to be not an environmental decision but the Supreme Court's most recent Affordable Care Act case, *King v. Burwell*.[53] In that case, although the Court ultimately agreed with the Internal Revenue Service's interpretation of the statute, it declined to give it any deference under *Chevron U.S.A. Inc. v. NRDC*.[54] Instead, the Court held that *Chevron* did not apply because the issue was too important. The interpretation of the statute would have a profound effect on national health care policy—indeed a ruling against the government would likely have spelled the end of the ACA. Even assuming Congress might delegate such a far-reaching policy decision to a federal agency, it would be unlikely to choose the IRS for that task. Accordingly, the Court held that *Chevron* did not apply.[55]

Most commentators agree that, if implemented in any form like EPA's proposed rule, the CPP—the intent of which appears to be to stop the use of coal as a fuel for power plants—will fundamentally alter the way electricity is generated and transmitted. The emissions goals set for Texas, for example, cannot be met without the early retirement of some of Texas' coal fleet. In *Delaware Department of Natural Resources and Environmental Control v. EPA*,[56] EPA disclaimed any expertise over energy markets or grid reliability,[57] and it will be difficult for EPA to credibly claim any agency expertise in power generation and transmission. Analogous to the treatment of *Chevron* in *King*, it could certainly be argued that if Congress were going to seek to radically reduce the use of coal to generate electricity, and thereby alter a national policy that dates back to the Kennedy administration, and if Congress were to entrust that decision to a federal agency, EPA would be an unlikely candidate.

Perhaps the most immediately pressing question is whether the D.C. Circuit might grant a stay of the CPP pending judicial review. In *EPA v. EME Homer City Generation, L.P.*,[58] the Cross-State Air Pollution Rule (CSAPR) case, the D.C. Circuit granted a stay based on declarations that said, in effect, the lights will go out if a stay is not granted. In the greenhouse gas cases, by contrasts, the court refused to grant a stay, despite arguments by the petitioners of irreparable economic harm as well as harm to sovereign state interest.

In the CPP challenge, it is not yet clear whether state regulators will be able to say that the lights will go out if a stay is not granted. Once EPA adjusts state budgets and, as is predicted, extends interim deadlines, there are likely to be much more significant hurdles to establishing irreparable harm based on electric reliability concerns than existed, for example, when the D.C. Circuit issued a stay on those grounds in the CSAPR case. Thus, the question will likely be whether the court will grant a stay based on a less dramatic showing that nevertheless comports with one or more types of "irreparable harm" that the court has previously found sufficient to support preliminary injunctive relief in other types of cases. The petitioners will be able to point to the *Michigan* case, in which the MATS rule was not stayed, and industry spent billions to comply,

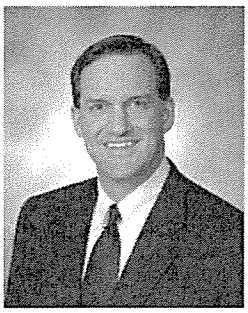
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[53] No. 14-114 (U.S. June 25, 2015).
[54] 467 U.S. 837 (1984).
[55] Slip op. at 8.
[56] No. 13-1093 (D.C. Cir. May 1, 2015).
[57] Slip op. at 22-25, 29-30.
[58] See Order, No. 11-1302, slip op. at 2 (D.C. Cir. Dec. 30, 2011).

and dozens of plants were retired early, in anticipation of a rule that may now never go into effect.

Whatever form the final CPP takes and regardless of the disposition of initial requests to stay the final rule, the D.C. Circuit and Supreme Court cases that will ultimately decide the fate of the CPP will easily be the most important environmental law cases decided in the history of the Clean Air Act. These case could shape the make-up of the electric generation fleet and the price of electricity for decades to come.

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Mike is recognized nationally for his expertise in federal air quality, waste, remediation, water issues impacting electric generation and is counsel for several electric generation interests in ongoing EPA proceedings and appeals pending before the D.C. Circuit Court of Appeals and the Supreme Court of the United States. In addition to his federal air quality practice, Mike has an active practice before the TCEQ and EPA in air, water, and waste management, as well as an extensive practice before the Railroad Commission of Texas and the Office of Surface Mining.

Mike is the Immediate Past Chairman of the State Bar of Texas Environmental and Natural Resources Law Section and as Secretary of the Board for *H_2O for Texas*. Mr. Nasi is an appointed member of the legislatively-created TCEQ Pollution Control Property Tax Exemption Advisory Committee.

Mike is consistently recognized on several "Who's Who" and "Best Lawyer" lists and, this year, was awarded the "Energy and Environmental Trailblazer Award" from the National Law Journal for the work he has done as General Counsel to the Clean Carbon Technology Foundation on Carbon Capture, Utilization, and Storage (CCUS). In 2010, was honored by *Environmental Law 360* as one of the "Top 10 Environmental Attorneys in America under 40". He was recently awarded the "Environmental Trailblazer" Award from the *National Law Journal* and profiled in the *Austin Business Journal* "Who's Who in Energy".

In addition to being active with his wife and three children in his church and youth sports programs, Mr. Nasi serves as Central Texas Salvation Army Vice-Chairman and Chair of the Development Committee.

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For over 25 years, Cindy has been assisting clients nationwide with resolving environmental problems through her experience as an attorney and chemical engineer. Before her legal career began 19 years ago, she worked as an environmental consulting engineer, completing air permits, removing underground storage tanks, and conducting asbestos inspections, among other projects. Prior to founding C Bishop Law, she was a partner at Gardere Wynne Sewell, LLP in Dallas.

Ms. Bishop's legal and technical background enables her to effectively and efficiently understand and resolve her clients' environmental problems. She has a broad range of litigation experience, including litigating federal CERCLA contribution and cost recovery actions before the US Supreme Court as well as state statutory and common law claims involving property damage and personal injury allegedly caused by contamination. In two separate federal cost recovery actions, she received favorable summary judgment decisions within one thirty-day period. Ms. Bishop has also defended numerous clients in environmental enforcement actions initiated by municipalities, the Texas Commission on Environmental Quality, and the United States Environmental Protection Agency, reducing or eliminating penalties.

She has helped clients close impacted sites using innovative, risk-based approaches, saving one client over $4 million in estimated cleanup costs. She has assisted clients with obtaining closure on several properties using municipal setting designations (MSD). She has also reviewed numerous environmental reports and records for properties to determine potential environmental liabilities for lenders and real estate developers and has defended potentially responsible parties in litigation with state and federal agencies to minimize the clients' liability at contaminated properties. She has reduced or eliminated state and federal penalties for clients through the Texas Audit Privilege Act and EPA's Self-disclosure Policy. Ms. Bishop also has resolved a variety of issues involving leaking underground storage tanks at former service stations located in many states, including Arizona, Arkansas, Illinois, Indiana, Iowa, Massachusetts, Michigan, Pennsylvania, Tennessee, and Texas.

Ms. Bishop's clients range from Fortune 50 companies to small businesses, including energy companies, chemical manufacturers, commercial developers, and airlines.

Honors and Awards

Recognized, The Best Lawyers in America - Environmental Law (Steven Naifeh & Gregory White Smith eds., Woodward/White, Inc.) (2008 – 2015)

Ranked, Chambers USA (Environmental Law 2011 - 2014)

Texas Super Lawyer - 2014

Distinguished Peer Review™ rating, Martindale-Hubbell® 4.5 out of 5

Professional Licenses

Admitted to practice before:

Texas State Courts

U.S. District Court for the Northern and Southern Districts of Texas

U.S. Court of Appeals for the Fifth Circuit

U.S. Supreme Court

Licensed Professional Engineer – Texas (Inactive Status)

Education

J.D. Southern Methodist University Dedman School of Law (1994)

B.S. Chemical Engineering, The Ohio State University (1986)

Publications

Author, The New ASTM Due Diligence Standard – More of the Same or Something Completely Different? 26th Annual State Bar of Texas Annual Environmental Superconference (August 2014)

Author, Getting It Right – A Guide to Environmental Due Diligence, *Commercial Real Estate Network* magazine (March 2012)

Author, Minimizing Environmental Liability in Bankruptcy and During Normal Business Operations, *Inside the Minds: Managing Environmental Liabilities in Bankruptcy* (Thomson Reuters/Aspatore 2010)

Author, Foraging Through the Jungle of Expert Discovery and Testimony, 4:4 Nat. Resources & Env't, Spring 2008.

Co-Author with Richard O. Faulk, Stacy Obenhaus and Jeff Gaba, *Cooper v. Aviall:*; Aviall's Brief to the U.S. Court of Appeals for the Fifth Circuit, 22:8 Toxic L. Rep. (BNA) 192 (Feb. 22, 2007).

Co-Author with Richard O. Faulk and Celeste Quiralte, Cost Recovery Under CERCLA Section 107 After *Cooper v. Aviall*, 37:12 Envtl. Rep. (BNA) 640 (Mar. 24, 2006).

Author, There and Back Again: The Progression and Regression of Contribution Actions Under CERCLA, Tul. Envtl. L.J. (2005).

Co-Author with Richard O. Faulk, Disturbing Limitations on CERCLA Contribution Actions – *Aviall Services, Inc. v. Cooper Industries, Inc.*, ABA Envtl. Crimes & Enforcement Committee Newsl., Apr. 2002.

Author, Implementing Corrective Action Under RCRA: Past, Present and Future, Envtl. Permitting, 1994.

Speeches

Regulation Week webinar: "The Cost of EPA Compliance - Audits and Inspections" (September 2014)

State Bar of Texas Annual Environmental Superconference: "Due Diligence – Does the Song Remain the Same?" (August 2014)

The Auditing Roundtable, South Central Regional Meeting: "Due Diligence – Does the Song Remain the Same?" (August 2014)

Denton County Bar Association – Real Estate, Probate and Trust Law Section: "Environmental Pitfalls in Real Estate Transactions" (October 2013)

American Society of Safety Engineers 40th Annual Professional Development Conference: "The Cost of Environmental Compliance – Audits and Inspections" (February 2013)

State Bar of Texas Annual Environmental Superconference: "Trial – Battle of the Experts and Other Tips" (August 2012)

American Institute of Chemical Engineers – Dallas Chapter: "Impact of the New NESHAP/NSPS Regulations on the Oil & Gas Industry" (March 2012)

Society of Texas Environmental Professionals – Dallas Chapter: "Hydraulic Fracturing – Myths and Maneuvers" (January 2012)

Dallas Bar Environmental Law Section: "Experts and Preserving Privileged Information" (August 2011)

Lone Star Network: "Hydraulic Fracturing 101" (May 21, 2011)

Address to Confidential Client: "Expert Discovery and Testimony – Avoiding Disaster" (June 13, 2008) (authored paper for proceedings).

Address to Confidential Client: "Municipal Setting Designations" (June 13, 2008) (authored paper for proceedings).

Air & Waste Management Association Annual Conference: "Environmental Liabilities – New Risks and Solutions" (June 27, 2007) (authored paper for conference proceedings).

Dallas Bar Environmental Law Section: "The Inside Skinny on *Aviall*" (2005).

Legal Issues for Texas Civil Engineers and Land Surveyors: "Understanding Environmental Law" (2005).

Asbestos Forum: "Defense Strategies for Weathering the Storm of New Asbestos Claims" (2005) (authored paper for forum proceedings).

Law Conference for the International Council of Shopping Centers: "Environmental Issues in Letters of Intent" (2004).

Law Conference for the International Council of Shopping Centers: "Protecting Yourself from Environmental Liability: Does Insurance Help?" (2003).

Dallas/Fort Worth Real Estate Council: "Voluntary Cleanup Program and Innocent Operator Program Impact on Real Estate Transactions" (Mar. 1999).

Understanding Wetlands (1999).

Food Safety (1998).

International Petroleum Exploration Conference: "Developments in The Clean Water Act" (1997) (authored paper for conference proceedings).

Air & Waste Management Association Annual Conference: "Corrective Action Management Units" (1994).

Other Engagements

Panel Moderator, State Bar of Texas Natural Resource Law Section Environmental Superconference (2008, 2010, 2011 and 2013).

Panel Moderator, Dallas Bar Association Environmental Law Section Meeting: What's Up With Wetlands? (2001).

Panel Moderator, Dallas Bar Association Environmental Law Section Meeting: Impact of Recent Air Regulations on the Dallas/Fort Worth Area (1998).

Lecturer, Address to the Tarrant County Junior College Environmental Class: Hot Topics In Environmental Law (1997).

Community/Professional Involvement

State Bar of Texas

Environmental and Natural Resources Law Section (Past Chair)

Dallas Bar Association

Environmental Law Section (Past Chair)

Denton County Bar Association

Petroleum Engineer's Club of Dallas

Society of Texas Environmental Professionals

Women in the Environment

Scholarship Chairperson, Ohio State Alumni Club of Dallas

Protecting the Lesser Prairie Chicken Under the Endangered Species Act: A Problem and an Opportunity for the Oil and Gas Industry

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I. Introduction

The brightest of President George H. W. Bush's thousand points of light were arrayed around the table. Those present included the Secretaries of the Departments of Interior and Agriculture and the Administrators of the Environmental Protection Agency and the National Oceanic and Atmospheric Administration. Principals sat at the table surrounded by their general counsels and scientists in the outer ring of chairs within whispering distance.[1] Convened for the Northern Spotted Owl, this was the "God Committee," so named because it held the god-like power to override the protections of the federal Endangered Species Act (ESA)[2] and allow actions that might cause the extinction of an entire species.[3]

The lead up to this meeting was intense. The timber industry in the Pacific Northwest was suffering increasing constraints placed upon it by judicial protection of the Northern Spotted Owl under the ESA.[4] But the available data, and thus the opinions of the government's lead scientists, pointed the causal finger at the timber industry for the species' decline.[5] In the end, despite strong political pressure and the prospect of severe regional economic consequences, the God Committee chose not to allow the continued, unmitigated logging of old growth forests inhabited by Northern Spotted Owls.[6]

The timber industry had lost this battle long before the God Committee was convened. They first sought to improve their practices,[7] then sought the God Committee's override, but ultimately failed to effectively remedy the habitat fragmentation that had brought the owl to the brink of extinction.[8] Following the God Committee's decision, a forest management plan was implemented, limiting logging on federal lands and providing extensive reserves for the Northern Spotted Owl and other endangered species.[9] While the massive job losses predicted by the timber industry did not materialize, many local logging communities were economically devastated.[10]

Today, it is a different bird affecting a different industry in a different region: the Lesser Prairie Chicken (LPC), *Tympanuchus pallidicinctus*, and the oil and gas activities in the Southwest. Currently, it is early in the ESA process; the LPC was only recently listed as "threatened" under the ESA in April of 2014, and the consequences of that listing for future projects have yet to be fully realized.[11]

But those who fail to learn the lesson of history are doomed to repeat it. Before the LPC declines to the point that more drastic measures become warranted—as happened in the case of the Northern Spotted Owl—industry and the Department of Interior need a strategy that both ensures the species' continued existence and allows oil and gas development and other industrial activities to continue in the five-state area the LPC occupies.

This Article offers ideas for such a strategy. Part II provides a general description of the ESA process. Part III discusses recent developments in the oil and gas industry, the biology of the LPC, and the intersection between the two. Part IV describes the LPC's listing under the ESA and the Range-wide Conservation Plan (RWP), a novel, voluntary collaboration among the five states comprising the LPC's range. Part V identifies challenges and opportunities for the oil and gas industry to help ensure the success of the RWP approach and avoid the potentially more stringent regulatory consequences of further decline of the LPC. In Part VI, this Article concludes that, notwithstanding these challenges, if the RWP succeeds in arresting the species' decline, it would represent a substantial victory for the voluntary conservation movement and the fundamental values of the ESA.

II. The Endangered Species Act

The ESA was enacted "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species..."[12] A species may be listed under the ESA as: (1) "endangered" if it is at risk of extinction throughout all or a significant portion of its range; or (2) "threatened" if it is likely to become endangered throughout all or a significant portion of its range.[13]

The U.S. Fish & Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) are authorized, on their own or upon petition by any person, to determine whether a particular species should be listed as endangered or threatened.[14] To make this determination, a species may be listed based on overexploitation, habitat loss, disease, predation, inadequate protection by other regulatory mechanisms, or other natural or artificial factors.[15] Listing determinations must be made "solely on the basis of the best scientific and commercial data available."[16] The law also directs the U.S. Secretary of Interior ("Secretary") to designate a "critical habitat," and authorizes the FWS and NMFS to take affirmative actions that "seek to conserve endangered species and threatened species."[17] Because of the ESA's expansive protections, these determinations are often contentious.[18]

Once a species is listed as endangered, the ESA prohibits the "taking" of that species, which can include "harm" through significant degradation of the species' habitat as well as killing, injuring, harassing or capturing the species, without an incidental take permit or other authorization.[19] Incidental take permits are available under the ESA for private projects, and cover takings that are incidental to otherwise lawful actions, known as incidental takings.[20] Incidental take applicants must prepare a habitat conservation plan that details: (1) the impacts of the taking; (2) measures to minimize and mitigate the impact, and funding to support those measures; (3) the alternatives to the taking that the applicant considered and reasons such alternatives were not used; and (4) other measures the government may require as being necessary or appropriate for the plan's purpose.[21] Mitigation measures are species-specific, and may include preserving existing habitat, enhancing, or restoring degraded habitat, establishing buffer areas around existing habitat, or modifying land use practices.[22] The FWS or NMFS and designated state agencies monitor these projects for compliance.[23] In addition, other federal agencies must consult with the FWS or NMFS to ensure that their actions, including permit approvals, leasing of federal lands, and other authorizations granted to private parties, do not jeopardize listed species or adversely modify their critical habitat.[24]

Typically, incidental take authorizations for private industrial or other development projects are focused on the project application at hand.[25] So long as the project developer satisfies the requirements for avoidance, mitigation or compensation, or any combination thereof, of harm to the species as specified in the developer's permit or other approval, the developer will not be subject to agency enforcement action or citizen lawsuits.[26] In some circumstances, however, compliance with requirements established piecemeal, project-by-project, may not suffice to reverse a broad declining trend in a species' numbers.[27] If the population continues to diminish, notwithstanding project developers' full legal compliance with their permits and leases, the inevitable result is

more extensive agency management actions and more stringent regulatory requirements imposed on future projects.[28] In such cases, more active attempts to promote coordinated, range-wide protection and sustainable population increases may better serve the long-term interests of both the species and the industry.

The case in point is the LPC, a widely distributed but declining species that has come into direct conflict with expansion of the oil and gas industry in the southwestern United States.[29]

III. The Oil Industry Encounters the Lesser Prairie Chicken

A recent article describes the spectacular, unanticipated surge in domestic U.S. oil and gas production as "nothing short of astonishing":[30]

For the past three years, the United States has been the fastest growing hydrocarbon producer, and the trend is not likely to stop anytime soon. U.S. natural gas production has risen 25 percent since 2010... [and] U.S. oil production... has grown by 60 percent since 2008, climbing by three million barrels a day to more than eight million barrels a day.[31]

The Southwest is among the major regions contributing to this growth. For example, the magnitude of oil and gas activity in the State of Texas is documented by the well permitting statistics maintained by the Texas Railroad Commission.[32] The widespread use of hydraulic fracturing and directional drilling techniques, enabling exploitation of the vast reserves of oil and gas that can be found in shale rock formations located deep beneath the surface is a key contributor to current growth in domestic oil and gas production.[33] In addition to advances in technology, two provisions of the Energy Policy Act of 2005, which amended the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA), assisted new development of domestic oil and gas reserves.[34] The Energy Policy Act largely eliminated hydraulic fracturing from the federal SDWA regulatory program, leaving such regulation primarily to state agencies.[35] In addition, the Energy Policy Act exempted from CWA permitting authority the discharge of uncontaminated stormwater that occurs during the setting up and construction of oil and gas production facilities.[36]

As the oil and gas industry continues to expand in the Southwest, it has encountered the LPC. The LPC is a reclusive, fifteen-inch-long bird known for dramatic mating behavior, in which males gather together in groups on a display ground, or "lek," collectively displaying to attract females.[37] The species' range includes eastern New Mexico and Colorado, west and northwest Texas (including the Permian Basin, an important region for oil and gas production), and western Oklahoma and Kansas.[38]

Human development and habitat fragmentation have greatly affected the LPC. The LPC lives in shortgrass prairie, a biome largely composed of sage and shinnery oak, a shrub-like tree that rarely grows over a few feet tall.[39] Given their preference for low-vegetation landscape, the LPC avoids tall vertical structures such as drilling equipment, telephone poles, and wind turbines, perceiving these structures as roosts for predators.[40] Additionally, the birds are low-flying and may collide with even relatively low obstructions.[41] The species tends to die off or migrate away from areas where more than 30% of the land has been disturbed.[42] Otherwise suitable LPC habitat adjacent to tall structures is often uninhabited, and the birds may abandon their lekking grounds when oil and gas activity occurs nearby.[43]

The LPC population has been declining; in 2012, only an estimated 45,000 LPCs remained in their original range.[44] Oil and gas exploration and production activities are not the sole contributors to this decline. Other threats to the LPC include habitat loss and fragmentation resulting from conversion of grasslands to agricultural uses, wind energy development, the presence of roads and other man-made structures, and the ongoing drought in the southern Great Plains.[45] Nevertheless, the LPC's wide range within the same region as booming oil and gas development activity, when combined with the LPC's sensitivity to disturbance, poses a particular problem for the industry. Accordingly, in 2012, when the FWS proposed listing the LPC as "threatened" under the ESA, oil and gas interests, as well as agricultural, wind energy and other stakeholders, were concerned about the potential for new protective measures imposing constraints on their current and future operations.[46]

IV. Protecting the LPC Under the Endangered Species Act

On April 10, 2014, the FWS published two final rules listing the LPC as "threatened" under the ESA and adopting a special rule for its protection (as discussed below).[47] The FWS determined that the LPC was threatened because of "the ongoing and probable future impacts of cumulative habitat loss and [habitat]

fragmentation" caused by conversion of grasslands to agricultural use, the encroachment by invasive woody plants, and development associated with the energy industry, including roads and vertical structures such as towers, wells, fences, and buildings.[48]

As noted above, once a species is listed as endangered, the ESA prohibits the "taking" of that species, which includes harm through significant degradation of the species' habitat, without an incidental take permit or other authorization.[49] In contrast, when a species is listed as threatened (as is the LPC), section 4(d) of the ESA grants significant discretion to the FWS as to whether and to what extent the taking prohibition will apply.[50]

A. The 4(D) Rule

Section 4(d) of the ESA authorizes tailored special rules that the FWS deems "necessary and advisable" for protecting threatened species.[51] Absent a Section 4(d) rule, threatened species are entitled to all of the same protections as endangered species under federal.regulations.[52] Using its Section 4(d) authority, the FWS combined its LPC listing with a special rule that "provides measures that are necessary and advisable to provide for the conservation" of the species.[53]

The Section 4(d) rule for the LPC is unique in that it effectively transfers most of the responsibility for protecting the birds from the FWS to a novel, voluntary, multistate collaboration among the five LPC range states. Specifically, the Western Association of Fish and Wildlife Agencies (WAFWA), a non-profit, quasi-governmental organization that relies on the efforts of member states and provinces to accomplish its objectives,[54] will administer the plan for the LPC, review and approve LPC protection plans submitted by private parties and provide oversight and enforcement against parties that fail to comply with their approved plans.[55] Such plan approval and enforcement authority is normally reserved for the FWS, which has never made such a broad delegation of responsibility for a listed species, threatened or endangered.[56]

B. The Range-wide Conservation Plan

The centerpiece of the LPC's Section 4(d) rule is a highly detailed Range-Wide Conservation Plan (RWP) for the LPC developed by a group of state wildlife officials under the auspices of the LPC Interstate Working Group.[57] The RWP reflects a new trend at the FWS to use voluntary, market-based incentives for species conservation.[58] The FWS endorsed the RWP in October 2013, prior to listing the LPC as threatened.[59] However, the FWS has now formally recognized the RWP as the prime vehicle for implementing the LPC's Section 4(d) rule.[60]

To offset projected impacts to LPC habitat, the RWP forecasts a need to commit nearly six million acres of privately-owned land in Colorado, Kansas, New Mexico, Oklahoma, and Texas to LPC conservation over the next thirty years.[61] This acreage represents approximately 36% of the species' occupied range.[62] Because landowner participation is voluntary, the RWP cannot specify the precise location of the lands that will be enrolled. However, the RWP places priority on what are referred to as LPC Focal Areas and the Connectivity Zones that connect these Focal Areas and includes maps identifying Focal Areas and Connectivity Zones.[63]

The RWP depends on voluntary participation by two types of parties: 1) *private landowners* (offset unit generators) who will provide the conservation lands, and 2) *project developers* (impact unit generators) who will pay fees that will be used to fund the conservation efforts of participating landowners.[64] Developers whose projects cause unavoidable impacts to the LPC can remain in compliance with the ESA by paying mitigation fees to fund offsite conservation lands.[65] Private landowners providing conservation lands, called "offset units," will receive cost-capped payments (akin to rental payments) for their participation, funded by the project developers' fees.[66] The targeted project developer categories include: oil and gas, electric transmission lines, wind power, cell and radio towers, agricultural activities, road construction and general construction.[67] The oil and gas industry and others remain free to pursue more conventional approaches to ESA compliance; in fact, several energy companies are pursuing incidental take permits under ESA Section 10 and a programmatic Habitat Conservation Plan for their anticipated LPC impacts.[68] Nevertheless, most companies appear likely to opt in to the RWP.[69]

As noted above, private landowners are incentivized to enroll in the RWP by the prospect of funding from project developer fees.[70] The amount paid to landowners is fixed as specified in the RWP and is quite modest, slightly above the per-acre price paid currently by the U.S.

Department of Agriculture's Natural Resources Conservation Service to farmers and ranchers who agree to manage portions of their land for the benefit of the LPC.[71] In exchange, the landowner agrees to manage the affected acreage for the benefit of the LPC.[72] Landowners, with assistance from consultants and the staff of the non-profit organization that will administer the RWP, must submit site-specific plans to restore and protect LPC habitat on portions of their land, e.g. restricting cattle grazing and implementing measures to control invasive vegetation that threatens the particular vegetation species used by the LPC.[73]

A key goal of the RWP is the protection of large LPC "strongholds" in each of the four ecoregions wherein the LPC exists in significant numbers.[74] As envisioned by the RWP, each LPC stronghold would be in the 50,000-acre size range.[75] The RWP envisions that these strongholds would have long-term protections, either permanent or on a thirty-year term.[76] Each individual stronghold is intended to support a viable LPC population, requiring at least six to ten leks with an estimated minimum range of 25,000-50,000 acres depending on habitat quality.[77] Landowners would be paid a premium to conserve prime LPC habitat in stronghold areas.[78] Conversely, project developers would face higher mitigation expenses in stronghold areas.[79] The goal is to provide anchor habitat for the LPC that is protected from fragmentation in areas known to be favorable for LPC breeding success.[80]

C. Regulation Under WAFWA

The RWP is administered by the WAFWA, a non-profit organization founded in 1922 that today represents twenty-three fish and wildlife agencies across the western U.S. and Canada.[81] The organization encourages principles of sound resource management as well as inter-agency coordination for wildlife protection.[82] WAFWA is a strong advocate for state control of fish and wildlife resources.[83] Decision-making authority within WAFWA for the LPC has been delegated to the heads of the fish and wildlife agencies of the five LPC range states, forming the LPC Initiative Council.[84] Routine administrative matters are managed by the WAFWA staff, several of whom are housed within the various state fish and wildlife offices of the five states.[85] Though WAFWA is not a governmental entity, it will perform quasi-governmental functions under the RWP, such as approval of conservation plans, collection of mitigation fees, distribution of mitigation payments to landowners, and enforcement of the RWP in cases of non-compliance.[86] In short, it will look and act like a regional, single-purpose natural resource agency.

With respect to the LPC, to provide the funds needed to make the landowner payments, WAFWA collects fees from participating project developers whose activities affect LPC habitat.[87] To ensure a net benefit for the bird, an offset ratio of greater than 1:1 is used to calculate the amount of conservation funding needed to offset each acre of impact.[88] As part of the RWP's impact minimization plan, developers are required to avoid or minimize their own adverse impacts on LPC habitat to the extent practical and to mitigate any unavoidable impact by paying the fees to WAFWA.[89] WAFWA selects the lands that will receive payments based on a priority ranking process.[90] Project developers do not select the land that will receive payments from WAFWA.[91]

To participate in the RWP, landowners and project developers must submit a detailed Certificate of Participation to WAFWA.[92] In addition, project developers must accept the terms of a standard form Conservation Agreement with WAFWA that details the parties' rights and responsibilities.[93] For landowners, primary obligations include performing the specific habitat protection measures for which they will be paid and allowing access to the land for WAFWA inspection.[94] The details of the landowner's LPC-related commitments are embodied in a site-specific Conservation Plan.[95]

For project developers, the initial enrollment process entails: (1) identifying the land that will be enrolled; (2) paying a $2.25 per-acre annual enrollment fee to WAFWA for the first three years of enrollment; and (3) identifying the developer's required mitigation (in dollars) for unavoidable impacts to LPC habitat.[96] Project developers must also follow practices to avoid or minimize adverse impacts to LPC habitat; such as focusing development on lands that have already been altered or cultivated.[97]

Most of the complexity of the enrollment process is associated with the highly detailed metrics of computing the number of offset units that a particular landowner will create through the Conservation Plan or the number of impact units that a project developer will create by its

project.[98] These units must then be converted to dollars that must be paid by project developers or paid to conservation landowners.[99]

Four factors are considered in computing a project developer's required mitigation fees under the RWP.[100] The first factor is the cost of implementing habitat conservation practices as determined by the U.S. Department of Agriculture.[101] The RWP contains tables that list these cost factors for 2013/2014 for each of the four ecoregions covered by the RWP.[102] Costs range from approximately $20 to $50 per acre per year.[103] This cost factor is also used to calculate the amount that a developer must pay to WAFWA for its administrative fees, currently 12.5% of the average habitat management cost for the ecoregion in question.[104]

For the second factor, the RWP includes various "impact multipliers" designed to discourage development (i.e. require more mitigation) in higher priority LPC areas.'[105] This aspect of the RWP relies on the Southern Great Plains Critical Habitat Assessment Tool (CHAT), which establishes four categories of areas in the five-state area in terms of their general value as LPC habitat.[106] The mitigation ratio in CHAT category I, for example, is 2.5 to 1, meaning that 2.5 acres of mitigation funding must be provided by the developer for each acre of impact.[107] In CHAT category IV, the lowest value class, the ratio is 1.6 to 1.[108]

The third variable in computing a developer's mitigation fee is an assessment of the condition of the specific site or sites that the developer plans to develop, not just the CHAT category of the site.[109] Sites that score higher on this Habitat Evaluation Guide (HEG) test will require a higher mitigation fee than lower-ranking sites."[110] The HEG test is based primarily on the amount and quality of a site's vegetation as LPC habitat, as well as the quality of vegetation in the surrounding one-mile radius.[111]

The fourth factor is the degree to which the developer provides buffer space in its development plan to ensure that new structures, such as well pads, do not adversely affect LPC habitat suitability.[112] For well pads, the buffer is 200 meters.[113] The RWP presumes that all land within the buffer area is completely unusable by LPCs.[114]

Similar factors go into calculating the amount of money that a landowner can expect to generate by committing to the conservation of LPC habitat on his or her land.[115] The process begins by determining the amount of un-impacted land that the landowner proposes to include in the Conservation Plan.[116] The buffer distances mentioned above are used to determine whether land is or is not impacted by development infrastructure, such as well pads and transmission lines."[117] Next, the landowner performs the HEG test for each parcel of land in the Conservation Plan and proposes actions that could elevate the HEG score.[118] Higher-scoring land receives a higher payment than lower-scoring land.[119] Next, the landowner uses the CHAT map to determine the offset multiplier that applies.[120] In CHAT category I, the offset multiplier is 1.25, whereas in CHAT category IV, the multiplier is 0.8.[121] Finally, the RWP weighs certain practices more heavily than others based on the cost of carrying that practice out; this is taken into account in calculating the payment that the landowner can expect to receive.[122]

Once enrollment in the RWP is confirmed by WAFWA, following receipt of the party's Certificate of Participation and execution of the WAFWA Conservation Agreement, project developers are entitled to assurance from the FWS that they have satisfied the requirements of the ESA and that any incidental taking of LPCs in connection with their project will not be treated as a violation of the ESA Section 9 taking prohibition.[123] This assurance is the prime motivation for project developers to enroll in the RWP since, without the assurance, the developer could additionally be required to obtain an ESA incidental take permit.[124] To qualify for such assurance, the developer must comply with the LPC impact avoidance and minimization requirements of the WAFWA Agreement[125] in addition to paying the required fees to WAFWA. WAFWA then must secure mitigation sites for which developers have paid by signing up landowners in a timely manner.[126]

Oversight and enforcement rests with WAFWA.[127] If a landowner participant is found to be out of compliance, WAFWA's prime tool is to discontinue or reduce payments to that landowner.[128] For project developers, WAFWA has the authority to issue non-compliance letters and to seek resolution of the matter within a forty-five-day period.[129] Receipt of three unresolved non-compliance letters within a three-year period will constitute grounds for WAFWA to withdraw the participant's coverage under the RWP and the ESA assurances that go with it.[130]

In sum, the RWP envisions an elaborate voluntary market for LPC conservation, funded by developer impact fees and drawing participation by landowners who own LPC habitats and are willing to protect and enhance that habitat in return for cost-capped payments from WAFWA.[131] WAFWA takes administrative fees out of the incoming revenue to cover its program operating costs.[132] Compliance monitoring is based largely on self-reporting with WAFWA oversight.[133] WAFWA itself conducts compliance monitoring, both for private landowners and project developers.[134] WAFWA member state agencies are responsible for monitoring the overall success of the RWP.[135]

D. Challenges Ahead

Notwithstanding the RWP's positive elements, its design presents important challenges. First, the sheer complexity of the Plan document, which is over 300 pages in length, makes it difficult for most readers to understand.[136] As noted previously, the RWP is built around a highly detailed set of criteria for project developers to determine the fees they must pay and an equally detailed set of criteria for determining the value of the conservation commitments made by participating landowners.[137] If developers and landowners cannot understand the structure and metrics of the RWP, enrollment and Plan execution could be difficult to sustain.

Second, the RWP places its primary reliance upon enrolling landowners under five- or ten-year contracts.[138] While the RWP presumes that most adverse impacts will be permanent, only 25% of the projected conservation acres will be protected by perpetual easements.[139] The RWP targets the other 75% of conservation efforts to be in the form of term contracts that generate annual payments to participating landowners.[140] This strategy presumes that protected LPC habitat will shift to new locations as landowner participants move in and out of the program.[141] While the RWP describes this feature as positive for LPC conservation,[142] it is not clear how this approach to mitigation will achieve optimal or predictable long-term conservation outcomes for the species.

Third, it is not clear that WAFWA will have the resources to ensure that RWP participants will be held accountable for failure to fulfill the obligations to which they have committed under their enrollment submissions. The limited staff resources that will be assigned to the RWP effort, including two technical or biologist positions per ecoregion,[143] may not be sufficient to support an aggressive enforcement program. In addition, it is not clear how WAFWA may be held accountable if the RWP does not meet its LPC habitat protection goals or the population target of 67,000 birds.[144] The RWP proposes a highly detailed adaptive management process to address these kinds of uncertainties, and it will be important to watch how aggressively the organization moves to follow this process.[145]

Finally, there is a question as to whether the relatively low prices currently being offered to landowners by the RWP will entice significant numbers of landowners to participate on a long-term basis. The RWP's price structure is based on government-established payment levels as opposed to prices that landowners are necessarily willing to accept.[146] In other words, the RWP is not a wholly market-based framework.[147]

V. Opportunities for the Oil and Gas Industry

If the RWP and other voluntary LPC protection programs do not achieve meaningful long-term benefits, it is unlikely that the federal government will simply let the species continue to decline toward endangerment and, potentially, eventual extinction. If voluntary action fails to protect the LPC, industry will most likely face the consequences of stricter, less flexible regulation, such as a future petition to list the LPC as endangered and court challenges to implementation of the LPC's Section 4(d) rule. Because either outcome could significantly disrupt oil and gas development as well as other economic activity in the region, it is in the industry's long-term interest for the RWP program to work effectively to increase the LPC population and avoid such disruption. Annual surveys of estimated LPC population numbers will take on heightened significance in this respect. Likewise, the RWP's adaptive management procedures will be an important tool for addressing possible under-performance of the Plan.

Companies can consider prudent steps to help ensure that they gain the benefits of the RWP—regulatory certainty at a reasonable price—without contributing to outcomes that could be detrimental to the species' prospects and increase the likelihood of an eventual endangered listing.

First, developers operating in LPC country, especially those in prime LPC habitat, should consider active measures to limit the impacts of their activities on the species.[148] The

RWP provides a comprehensive list of measures that project developers can take to avoid or minimize their adverse impacts on the LPC.[149]

Second, where oil and gas development in LPC habitat cannot be avoided or minimized, companies may wish to take steps to ensure that WAFWA uses their fees for permanent, as opposed to temporary, habitat conservation. In particular, companies can urge WAFWA to adopt procedures that give developers a voice on the use of their payments for permanent protection of identified lands. As noted above, the RWP strategy presumes that protected LPC habitat will shift over time as participant landowners move in and out of the program, but it is not clear how this approach will achieve the maximum results for the species.

The RWP specifies that permanent conservation is to be carried out in accordance with the same standards that must be achieved by ESA "conservation banks."[150] Conservation banks are regulated enterprises that take advantage of growing private sector interest in the ecosystem conservation space.[151] In part because the creation and sale of species credits is a conservation bank's primary function, not just an ancillary source of revenue, such banks have been recognized as a superior approach to mitigation.[152] This recognized approach to conservation would be in the long-term best interest of industry, as it appears more likely to lead to sustainable LPC population increases and reduced risk of future, stricter regulation. Further, it is possible that, either the pending litigation (which challenges the promulgation of the LPC's Section 4(d) rule on its face), or future challenges to actions under the RWP may ultimately be successful.[153] Companies that have provided for designated permanent mitigation may find themselves less vulnerable to challenges to their reliance on the RWP than companies that undertook only temporary habitat conservation.

Third, companies should consider pursuing permanent conservation, in part, because this approach has worked before for the oil and gas industry for other ESA-listed species. For example, in 2012, TransCanada sought to complete the southern portion of its controversial Keystone XL pipeline running from Cushing, Oklahoma to Nederland, Texas.[154] A federally-listed endangered species, the American Burying Beetle, is present in an area in eastern Oklahoma through which the pipeline was sited to cross, potentially resulting in an incidental take of the species.[155] Working closely with FWS, TransCanada established a permittee-responsible conservation plan that protected prime beetle habitat in perpetuity.[156] The Keystone McAlester Conservation Area (KMCA) was created as a result.[157] Not only was TransCanada able to satisfy regulators and obtain an incidental take permit for this portion of its pipeline, but future permittees now have a vehicle for similar, permanent conservation measures at an American Burying Beetle Conservation Bank located adjacent to the KMCA.[158] While the species still faces challenges, this effort highlights an approach to protection of an ESA-listed species that enhances long-term recovery prospects.

Finally, industry needs to carefully monitor the success of the overall RWP effort and be prepared to reinforce weak spots that might develop during its implementation. For example, it may turn out that WAFWA lacks adequate staff resources to administer a voluntary program involving hundreds of participants and millions of dollars spread across five states. If so, it may be in the industry's best interests to provide technical or even financial support, over and above the administrative fees it is initially required to pay into WAFWA.

VI. Conclusion

Few species have presented conservation challenges under the ESA that are as difficult as those the LPC presents given the size of the bird's range and the overlap of its range with competing land uses, including, but by no means limited to, oil and gas development. The FWS may have disappointed the states and industry by listing the. LPC as threatened, but it has crafted a plan that delegates unprecedented implementation authority to a quasi-governmental, state-led authority, WAFWA. WAFWA will in turn administer a massive voluntary program to protect the LPC from habitat loss and fragmentation, its primary threats.[159]

This Article identifies several key challenges facing the RWP, primarily its reliance upon many short-term, low-cost, voluntary contracts with landowners to protect LPC habitat. It is not yet clear how such a decentralized approach to conservation can effectively combat habitat fragmentation to a degree large enough to protect the entire species. If the experiment does not succeed, and the LPC's numbers decline over the coming years, the LPC could indeed become a growth-limiting factor for the oil and gas industry in the economically active five-state

region that the species inhabits. On the other hand, if LPC numbers rise significantly, the RWP will represent a victory for the voluntary conservation movement and the fundamental values of the ESA. Such a success could then be replicated as an innovative approach to conservation for other wide ranging species under the ESA.

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Endnotes

1 Author Thomas Campbell was present at this God Committee meeting as the General Counsel of the National Oceanic and Atmospheric Administration.

2 16 U.S.C.A. §§ 1531-1544 (2008).

3 Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 687 (2007) ("Because it has the authority to approve the extinction of an endangered species, the Endangered Species Committee is colloquially described as the `God Squad' or `God Committee."); *see also* Erik M. Yuknis, Note, *Would a "God Squad" Exemption Under the Endangered Species Act Solve the California Water Crisis?*, 38 B.C. Envtl. Aff. L. Rev. 567, 582-83 (2011) (discussing the Northern Spotted Owl exemption process).

4 *See, e.g.*, Seattle Audubon Soc. v. Evans, 771 F.Supp. 1081 (W.D. Wash. 1991), *aff'd in part, rev'd in part*, 952 F.2d 297 (9th Cir. 1991).

5 *See* Interagency Scientific Comm. to Address the Conservation of the N. Spotted Owl, a Conservation Strategy for the N. Spotted Owl 1 (1990) [hereinafter ISC Report] (concluding that the spotted owl was "imperiled over significant portions of its range because of continuing losses of habitat from logging..."), *available at* http://www.fws. gov/wafwo/species/Fact%20sheets/NSO%20Interagency%20Conservation%20Strategy.pdf, *archived at* http://perma.cc/6XJ2-3LNP

6 Notice of Decision, 57 Fed. Reg. 23405, 23405-08 (Endangered Species Committee June 3, 1992) (rejecting exemptions for thirty-one of forty-four proposed timber sales and requiring mitigation measures for the thirteen sales which were approved). For a discussion of the intense political and economic pressure surrounding the God Committee proceedings, see Oliver A. Houck, *The Endangered Species Act and its Implementation by the U.S. Departments of Interior and Commerce*, 64 U. Coto. L. Rev. 277, 333-44 (1993).

7 *See, e.g.*, James K. Agee et al., Creating a Forestry for the 21st Century: The Science of Ecosystem Management 431-33 (Kathryn A. Kohm & Jerry F. Franklin eds., Island Press 1997) (discussing the voluntary efforts of private forest landowners to establish new forestry practices to preserve wildlife habitat in the state of Washington during the late 1980s); Andrew Pollack, *Louisiana-Pacific Plans to End Clear-Cutting in California*, N.Y. Times (Mar. 7, 1991), http://www.nytimescom/1991/03/07/business/louisiana-pacific-plans to-end-clear-cutting-in-california.html.

8 ISC REPORT, *supra* note 5, at 22 (describing declining spotted owl populations due to habitat fragmentation caused by logging); Houck, *supra* note 6, at 288 ("Further information soon proved this confidence in existing management programs quite misplaced. The Owl was on the road to extinction and its listing could be avoided no longer.").

9 Erik Loomis & Ryan Edgington, *Lives Under the Canopy: Spotted Owls and Loggers in Western Forests*, 52 Nat Res. J. 99, 112 (2012).

10 *Id.* at 115.

11 Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Lesser Prairie-Chicken, 79 Fed. Reg. 19,974, 19,974-20,070 (April 10, 2014) (codified at 50 C.F.R. § 17.11); Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. 20,074-85 (April 10, 2014) (codified at 50 C.F.R. § 17.41).

12 16 U.S.C. § 1531(b) (1988).

13 *Id.* § 1532(6), (20).

14 *Id.* § 1533 (2003).

15 *Id.* § 1533(a)(1)(A)-(E); 16 U.S.C. § 1531(c)(1).

16 *Id.* § 1533(b)(1)(A).

17 *Id.* § 1532(5)(A), (C) (noting that critical habitat is "the specific areas within the geographical area occupied by the species at the time it is listed... [and] specific areas outside the geographical area occupied by the species at the time it is listed... upon a determination by the Secretary that such areas are essential for the conservation of the species." However, "[e]xcept in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species."); *id.* § 1533(3)(A) (indicating that the designation of critical habitat shall be made "on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and other relevant impact, if specifying any particular areas as critical habitat unless he determines... that the failure to designate such area as critical habitat will result in the extinction of the species concerned."); *id.* § 1531(c) (1).

18 *See, e.g.*, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978) (addressing the controversy surrounding the listing of the snail darter); Loomis & Edington, *supra* note 9, at 102; Yuknis, *supra* note 3, at 578-583.

19 16 U.S.C. § 1538 (1988); 16 U.S.C. § 1532(19); Babbitt v. Sweet Home Chapter of Communities for a Great Or., 515 U.S. 687, 708 (1995).

20 16 U.S.C. § 1538.

21 16 U.S.C. § 1539(a)(2) (1988).

22 U.S. Fish & Wildlife Serv., Endangered Species Permits: HCP - Frequently Asked Questions, http://www.fws.gov/midwest/endangered/permits/hcp/hcp_faqs.html (last updated

June 10, 2014), *archived at* http://perma.cc/3BED-G6S8.

23 *Id.*

24 16 U.S.C. § 1536(a)(2) (1988).

25 *See* Fish & Wildlife Serv., U.S. Dep't of the Interior, Habitat Conservation Planning and Incidental Take Permit Processing Handbook app. 17 (1996), *available at* http://www.nmfs.noaa.gov/pr/pdfs/laws/hcp_handbook.pdf, *archived at* http://perma.cc/ 9XCC-ELZ3.

26 *See* 16 U.S.C. § 1538(a) (1988); 16 U.S.C. § 1540 (2002).

27 *See, e.g.*, Listing of Steller Sea Lions as Threatened Under Endangered Species Act with Protective Regulations, 55 Fed. Reg. 12,645, 12,645-62 (Apr. 5, 1990) (to be codified at 50 C.F.R. pt. 227); Threatened Fish and Wildlife: Change in Listing Status of Steller Sea Lions Under the Endangered Species Act, 62 Fed. Reg. 24,345, 24,345-55 (May 5, 1997) (codified at 50 C.F.R. at pts. 222 and 224); Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for Loach Minnow, 51 Fed. Reg. 39,468, 39,468-78 (Oct. 28, 1986) (codified at 50 C.F.R. pt. 17); Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for Spikedace, 51 Fed. Reg. 23,769, 23,769-81 (July 1, 1986) (codified at 50 C.F.R. pt. 17); Endangered and Threatened Wildlife and Plants; Endangered Status and Designations of Critical Habitat for Spikedace and Loach Minnow: Final Rule, 77 Fed. Reg. 10,810, 10,810-10,932 (Feb. 23, 2012) (codified at 50 C.F.R. pt. 17).

28 For example, after changing the listing of the western population of steller sea lions from threatened to endangered, the United States government expanded the restrictions on fishing for species that serve as a food resource for the sea lion. *See, e.g.*, Fisheries of the Exclusive Economic Zone off Alaska; Steller Sea Lion Protection Measures for the Pollock Fisheries Off Alaska, 65 Fed. Reg. 3,892, 3,892-3,900 (Jan. 25, 2000) (codified at 50 C.F.R. pt. 679); Fisheries of the Exclusive Economic Zone Off Alaska; Steller Sea Lion Protection Measures for the Pollock Fisheries Off Alaska, 64 Fed. Reg. 3,437, 3,437-46 (Jan. 22, 1999) (codified at 50 C.F.R. pt. 679).

29 Another such example is the dune sagebrush lizard. *See* Nicholas Parke, *The Texas Oil and Gas Industry vs. the Dune Sagebrush Lizard: How the Texas Habitat Conservation Plan Saved More Than Just a Lizard*, 43 Tex. Envtl. L.J. 71, 71-99 (2012).

30 Edward L. Morse, *Welcome to the Revolution: Why Shale is the Next Shale*, Foreign Affairs 3-9 (May/June 2014), *available at* http://www.foreignaffairs.com/articles/141202/edward-l-morse/welcome-to-the-revolution, *archived at* http://perma.cc/9QTS-EUC6.

31 *Id.*

32 R.R. Comm'n of Tex., Summary of Drilling, Completion and Plugging Reports Processed (Aug. 2014), *available at* http://www.rrc.state.tx.us/media/23445/ogdc0814.pdf, *archived at* http://perma.cc/8FZ6-S2JZ.

33 *See* Mit Energy Initiative, The Future of Natural Gas: An Interdisciplinary MIT Study 17-52 (2011), *available at* https://mihi.mit.edu/system/files/NaturalGas_Report.pdf, *archived at* http://perma.cc/ZY59-YVYK.

34 U.S. Senate Comm. on Energy & Natural Res., The Energy Policy Act Of 2005 Anniversary Report 16-18 (2006), *available at* http://www.energy.senate.gov/public/ index.cfm/files/serve?File-id=F3ef8500-1a60-4c8b-b455-4279b8f86e6d, *archived at* http://perma.cc/9EQ2-U6FX; Uma Outka, Symposium, *Environmental Law and Fossil Fuels:. Barriers to Renewable Energy*, 65 Vand. L. Rev. 1679, 1706-10 (2012) (discussing the provisions of the Energy Policy Act of 2005 meant to encourage oil and gas development); Carrie Covington Doyle, Note & Comment, *The Modern Oil Shale Boom: An Opportunity for Thoughtful Mineral Development*. 20 Colo. J. Int'l Envtl. L. & Pol'y 253, 265-69 (2009) (discussing the effect of the Energy Policy Act of 2005 on the expansion of hydraulic fracturing in the oil and gas industries).

35 42 U.S.C. § 300h(d)(1)(B)(ii) (2005); *see also* Terry W. Roberson, *Environmental Concerns of Hydraulically Fracturing a Natural Gas Well*, 32 Utah. Envtl. L. Rev. 67, 77-83 (2012) (discussing the litigation precipitating congressional action to exempt hydraulic fracturing from SDWA).

36 33 U.S.C. §§ 1342(a)(1) & 1362(24) (2014); *see also* Roberson, *supra* note 35, at 83-85 (discussing the effect of the Energy Policy Act of 2005 on the CWA).

37 Div. Of Agric. Sci. & Natural Res., Okla. Coop. Extension Serv., Okla. State Univ., Habitat Evaluation Guide For The Lesser Prairie-Chicken 2-3 (2014), [hereinafter Habitat Evaluation], *available at* http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-6516/E-1014%20Lesser%20Prairie%o20Chicken.pdf, *archived at* http://perma.cc/L8KX-7VV2.

38 *Id.* at 2.

39 *Id.*

40 *Id.* at 9-11.

41 *Id.* at 9 (depicting special visibility measures for fences in LPC habitat to avoid collisions).

42 *Id.* at 15.

43 *Id.* at 10.

44 Endangered and Threatened Wildlife and Plants; Determination of Status for the Lesser Prairie-Chicken, 79 Fed. Reg. 19,974, 20,010 (April 10, 2014) (to be codified at 50 C.F.R. pt. 17).

45 Habitat Evaluation, *supra* note 37, at 2.

46 *See* Endangered and Threatened Wildlife and Plants; Listing the Lesser Prairie-Chicken as a Threatened Species, 77 Fed. Reg. 73,828, 73,828-88 (December 11, 2012) (to be codified at 50 C.F.R. pt. 17). The proposed listing received 57,350 comments and eighty-five organizations or individuals provided comments at the February 2013 public hearings. These included letters from trade associations such as the Colorado Oil & Gas Association, ID FWS-R2-ES-2012-0071-0273, the Texas Oil and Gas Association, ID FWS-R2-ES-2012-0071-0439, and individual companies and mineral rights holders throughout the LPC's range.

47 Endangered and Threatened Wildlife and Plants; Determination of Status for the Lesser Prairie-Chicken, 79 Fed. Reg. at 19,974-20,070; Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. at 20,074, 20,074-85 (April 10, 2014) (to be codified at 50 C.F.R. pt. 17).

48 Determination of Status for the Lesser Prairie-Chicken, 79 Fed. Reg. at 19,974.

49 16 U.S.C. § 1538(a) (1988).

50 *See* 16 U.S.C. § 1533(d) (2003). The authority to promulgate special rules under this section applies only to threatened species. Species listed as endangered receive the full protection of the ESA, unmodified by any special rules. Additionally, a threatened species for which a special rule has not been promulgated enjoys the same protection as an endangered species. 50 C.F.R. § 17.31(a) (2012).

51 16 U.S.C. § 1533(d).

52 50 C.F.R. § 17.31.

53 Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. 20,074, 20,074 (April 10, 2014) (to be codified at 50 C.F.R. pt. 17).

54 Western Ass'n of Fish & Wildlife Agencies (WAFWA, Our Mission, http://www.wafwa.org/html/about.shtml (last visited Oct 13, 2014), *archived at* http://perma.cc/7FEQT46E. WAFWA itself has no binding authority.

55 Special Rule for the Lesser Prairie-Chicken, 79

Fed. Reg. at 20,075. The FWS will continue compliance monitoring activities in conjunction with WAFWA, but the lion's share of management activities for the LPC is now vested outside of the FWS. *Id.* at 20,082. WAFWA's role in the program is discussed in greater detail below.

56 The Section 4(d) rule has been challenged on these and other grounds by environmental groups. Complaint for Declaratory and Injunctive Relief, Defenders of Wildlife v. U.S. Fish & Wildlife Serv., No. 1:14-cv-1025 (D. D.C. June 17, 2014), *available at* http://www.biologicaldiversity.org/species/birds/pdfs/Complaint_lesser_prairie_chicken.pdf, *archived at* http://perma.cc/C88Z-GGMA. While the complaint specifically alleges violations of the Administrative Procedures Act, the National Environmental Policy Act, and the ESA, the initial sixty-day notice of intent to sue broadly asserted that the FWS had "unlawfully delegated its ESA authority to State wildlife agencies" Memorandum from Defenders of Wildlife et al. to Mr. Daniel M. Ashe, Dir., U.S. Fish & Wildlife Serv., and Sally Jewell, Sec'y, U.S. Dep't of the Interior, at 6 (April 10, 2014), *available at* http://www.biologicaldiversity.org/species/birds/pdfs/Lesser_Prairie_Chicken_60-day_Notice_4-10-2014.pdf, *archived at* http://perma.cc/E8MV-CLNR. Similarly, the FWS was challenged for relying on state conservation plans in withdrawing its proposed endangered listing of the dunes sagebrush lizard. Defenders of Wildlife v. Jewell, No.13.0919 (RC), 2014 WL 4829089, at *1 (D. D.C. Sept. 30, 2014). In that case, the court rejected plaintiffs' argument that implementation of the voluntary conservation plans was too speculative and uncertain, concluding that the FWS's reliance on the plans was reasonable and supported by the record. *Id.* at *8. *But see* Defenders of Wildlife v. Jewell, No 12-1833(ABJ), 2014 WL 4714847, at *13 (D. D.C. Sept. 23, 2014) (finding that the FWS inappropriately relied on state conservation measures for the gray wolf). Meanwhile, state, industry and rancher groups are challenging the listing of the LPC as threatened, charging that the FWS did not grant *enough* credence to conservation efforts already implemented at the state and industry level. *See* Amended Complaint for Declaratory and Injunctive Relief at 38-40, Oklahoma v. Jewell, No. 4:14-cv-00123-JHP-PJC (N.D. Okla. filed Apr. 1, 2014), *available at* http://ag.ks.gov/docs/default-source/documents/lesser-prairie-chicken-complaint.pdf, *archived at* http://perma.cc/Y6V4-JR2T; see also Oklahoma Independent Petroleum Association v. Department of Interior, No. 14-cv-307-JHP (N.D. Okla. filed June 8, 2014), Permian Basin Petroleum Association v. Department of Interior, No. 14-cv-0050 (W.D. Tex. Filed June 9, 2014) and Hutchinson v. Department of Interior, No. 14-cv-0509-JHP (N. D. Okla. Filed Aug. 27, 2014).

57 Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. at 20,074. The LPC Interstate Working Group was formed under the auspices of WAFWA. Lesser Prairie Chicken Interstate Working Group, http://www.wafwa.org/html/prairie_chicken.shtml (last visited Oct. 13, 2014), *archived at* http://perma.cc/6R4L-BALJ. The Working Group is a technical group associated with the WAFWA Grassland Initiative with five states committing staff to the group. *Id.*

58 *See also* Policy Regarding Voluntary Prelisting Conservation Actions, 79 Fed. Reg. 42,525, 42,525-32 (July 22, 2014).

59 Fish & Wildlife Serv., U.S. Fish and Wildlife Service Endorses Western Association of Fish And Wildlife Agencies Lesser Prairie-Chicken Range-Wide Conservation Plan 1 (Oct. 2013), *available at* http://www.fws.gov/southwest/es/Documents/R2ES/LPC_NR_WAFWA_ConservationPlan_230ct2013.pdf, *archived at* http://perma.cc/NJM8826X.

60 *See* Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. at 20,074, 20,078-79 (fully adopting the RWP as a Section 4(d) special rule).

61 Western Ass'n of Fish & Wildlife Agencies, The Lesser Prairie-Chicken Range-Wide Conservation Plan 27, 72 (2013) [hereinafter RWP], *available at* http://www.wafwa.org/documents/2013LPCR-WPfinalfor4drule12092013.pdf, *archived at* http://perma.cc/C2H3-LQYH.

62 *Id.* at 72-73.

63 *Id.* at 79.

64 *Id.* at 1.

65 *Id.* at 273-76.

66 *Id.* at 262-63.

67 *Id.* at 274.

68 *Id.* at 103. The ESA provides for some exception from liability for acts otherwise prohibited by the ESA contingent on the actor's submitting and adopting an approved Habitat Conservation Plan. 16 U.S.C. § 1539; *see supra* notes 21-22 and accompanying text.

69 *See* RWP, *supra note* 61, app. L at 39 (LPC working group estimated that oil and gas companies would be willing to enroll a minimum of five million acres).

70 RWP, *supra* note 61 and accompanying text.

71 Id. RWP, *supra* note 61, at 294-97.

72 *Id.* at 298-99.

73 *Id.* at 1-55 app. J. The Natural Resources Conservation Service has published guidance for conservation plans. *Id.*

74 *Id.* at 84 (recommending "strongholds" in each of the four ecoregions, which are shinnery oak, sand sagebrush, mixed grass, and short grass). While initial plans are intended to target existing large contiguous blocks of LPC habitat, the RWP envisions giving increased conservation priority to newly discovered occupied LPC habitat.

75 *Id.*

76 *Id.*

77 *Id.*

78 *Id.* at 84, 100.

79 *See id.* at 98, 235-37, 262 (giving higher habitat quality scores to lands within one mile of other potential habitat and using a habitat score to calculate the maximum mitigation fees).

80 *Id.* at 5, 93-94.

81 *Id.* app. L at 1, 4; Western Assn of Fish & Wildlife Agencies, Our History, http:// www.wafwa.org/html/history.shtml (last visited Oct. 13, 2014), *archived at* http://perma.cc/V67N-FCD4.

82 Western Ass'n of Fish & Wildlife Agencies, Our Mission, http://www.wafwa.org/ html/about.shtml, *archived at* http://perma.cc/7FEQ-T46E.

83 *Id.*

84 RWP, *supra* note 61, at 1, 111.

85 Western Ass'n of Fish & Wildlife Agencies, *supra* note 82.

86 *See* RWP, *supra* note 61, at app. L at 3.

87 *Id.* at 92-102.

88 *Id.* at 92.

89 *Id.* at 102-10. Avoidance measures include avoiding siting projects in focal areas or within 1.25 miles of known leks, focusing development on already altered or cultivated lands. *Id.* at, 107. Where avoidance is not possible, developers must minimize their impacts including using common rights of way for new infrastructure like roads, fences, and well pads. *Id.* at 108. Specifically, oil and gas developers may minimize their impacts by using directional drilling and clustering *Id.* at 108. When a developer still faces unavoidable impacts, the developer then mitigates through participation in the RWP. *Id.* at 108.

90 *Id.* at 262.

91 *Id.*

92 *Id.* at 1, 48, 215-30.

93 *Id.* at 1, 99, 183-214.

94 *Id.* at 193-94.

95 *Id.* at 100.

96 *Id.* at 212.

97 *Id.* at 107.

98 *Id.* at 232-43, 252-74.

99 *Id.* at 252-74.

100 *Id.* at 232.

101 *Id.*

102 *Id.* at 236.

103 *Id.*

104 *Id.* at 261.

105 *Id.* at 232.

106 *Id.* at 100, 232

107 *Id.* at 236.

108 *Id.*

109 *Id.* at 232.

110 *Id.* at 235-37.

111 *Id.* at 98-99.

112 *Id.* at 232.

113 *Id.* at 95.

114 *See id.* at 234.

115 *Id.* at 94-99.

116 *See id.* at 95.

117 *Id.*

118 *Id.* at 98.

119 *See id.* at 257-58.

120 *Id.* at 100.

121 *Id.*

122 *Id.* at 262-63.

123 *Id.* at 2, 205-09. To enroll in the RWP program, a non-federal property owner must complete a WAFWA Conservation Agreement (WCA) and a WAFWA Certificate of Participation (WCP) signed by WAFWA. *Id.* at 189.

124 *See generally id.* at 1-154.

125 *Id.* at 102-10, 197-201; *see also supra* note 89 and accompanying text.

126 *See* Endangered and Threatened Wildlife and Plants; Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. 20,074-85 (April 10, 2014) (codified at 50 C.F.R. § 17.41).

127 RWP, *supra* note 61, at 122-27, 213-14, 227.

128 *See id.* at 124 (requiring compliance monitoring with a new habitat evaluation guide score which can be used to reduce the offset payment as discussed above).

129 *Id.* at 227.

130 *Id.*

131 *See id.* at 262-71. Payments are determined based on the ecoregion in which the offset unit is located and on the cost associated with implementing the prescribed conservation practice for the area. *Id.* at 263. Additionally, landowners placing their land under a perpetual conservation easement are entitled to a maximum of 50% of the fair market value for the area. *Id.* at 269.

132 *Id.* at 212.

133 *See id.* at 228.

134 *Id.* at 124. Private landowners must grant WAFWA personnel access to confirm compliance with RWP specifications. *Id.* Project developers are also monitored for compliance with their avoidance and mitigation measures. *Id.* If the project developer exceeds three notices of noncompliance and fails to address those measures within the allotted timeframe, the developer can be terminated from RWP coverage. *Id.* at 124-25.

135 *Id.* at 122.

136 *Id.* at 1-308.

137 *See id.* at 237-41, 262-71.

138 *Id.* at 93, 213.

139 *Id.* at 91.

140 *Id.*

141 *Id.*

142 *Id.* at 26 (indicating that range shifts may be beneficial due to changing climatic conditions).

143 *Id.* at app. L at 24.

144 *Id.* at 71.

145 *Id.* 116-21. For instance, in the event that an enrollee is not in compliance, the adaptive management plan requires sending a noncompliance letter or removal of certification. *Id.*, at 118. If the quality of offset acreage is less than that of impacted acreage on average, the RWP adaptive management plan calls for adjusting offset ratios, mitigation unit values, and prioritizing habitat quality when ranking landowner offers. *Id.* at 119.

146 *See id.* at 262-71.

147 The FWS acknowledged the potential success of the program is dependent on adequate enrollment. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Lesser Prairie-Chicken, 79 Fed. Reg. 19,974, 19,980 (Apr. 10, 2014) (codified at 50 C.F.R. pt. 17) ("In conclusion, we have a high level of certainty that the rangewide plan will improve the status of the species into the future if sufficient enrollment occurs and the plan is implemented accordingly. However, the rangewide plan has not contributed to the elimination or adequate reduction of the threats to the species at the current time to the point that the species does not meet the definition of threatened or endangered").

148 *See supra* note 89.

149 *Id.* at 197-201; *see also supra* note 89 for listed measures.

150 RWP, *supra* note 61, at 93. Conservation bank guidance requires a robust management plan, careful site selection, a sufficient buffer area around the bank, and extensive monitoring. U.S. Fish & Wildlife Serv., Guidance For The Establishment, Use, And Operation Of Conservation Banks 1-18 (2003) *available at* http://www.fws.gov/endangered/esa-library/pdf/Conservation_Banking_Guidance.pdf, *archived at* http://perma.cc/68UB688A; U.S. Fish & Wildlife Serv., Conservation Banking: Incentives For Stewardship 1-2, (2012), *available at* http://www.fws.gov/endangered/esa-library/pdf/conservation_ banking.pdf, *archived at* http://perma.cc/H5H3-QZWR.

151 *See* Conservation Banking: Incentives For Stewardship, *supra* note 150, at 1-2.

152 *See* Gregory M. Parkhurst & Jason F. Shogren, *Evaluating Incentive Mechanisms for Conserving Habitat*, 43 Nat. Resources J. 1093, 1147 (2003) ("When markets have many buyers and sellers such that the developmental pressure in the region is strong, conservation banking is the preferred mechanism for species protection.").

153 Defenders of Wildlife v. U.S. Fish & Wildlife Serv., No. 1:14-CV-1025 (D. D.C. filed July 17, 2014).

154 TransCanada Keystone Pipeline, LP, Final Habitat Conservation Plan: TransCanada Keystone Pipeline, LP Gulf Coast Project 3 (2012) [hereinafter TransCanada HCP] http://www.fws.gov/southwest/es/oklahoma/documents/te_species/keystone/final%20keystone%20hcp%2020121029.pdf, *archived at* http://perma.cc/796Z-N3MW.

155 *Id.*; Notice and Request for Comment for Draft Environmental Assessment and Draft Habitat Conservation Plan for TransCanada Keystone Pipeline's Gulf Coast Project in Oklahoma, 77 Fed. Reg. 49,824, 49,824 (August 17, 2012).

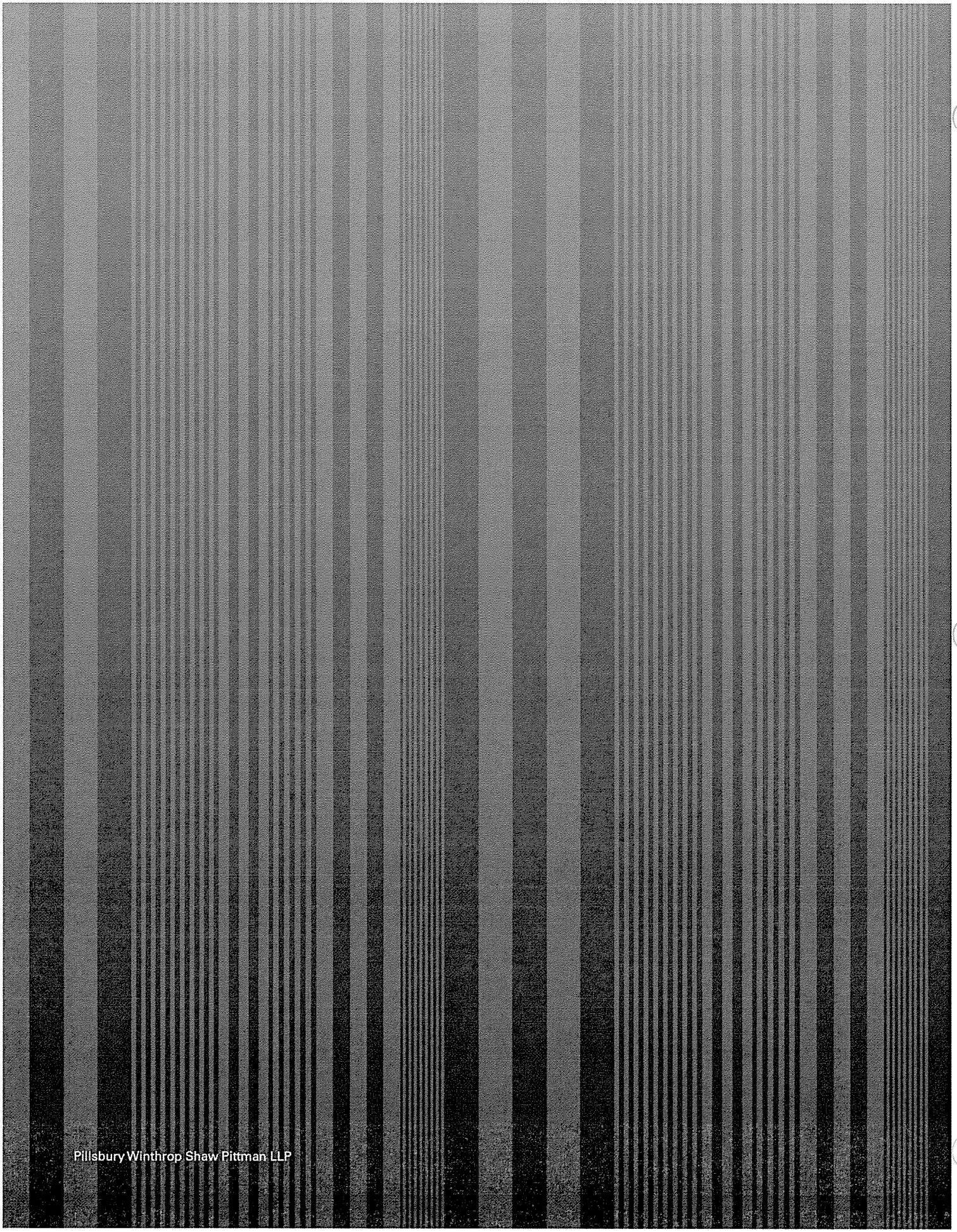
156 Notice and Request for Comment for Draft Environmental Assessment and Draft Habitat Conservation Plan for TransCanada Keystone Pipeline's Gulf Coast Project in Oklahoma, 77 Fed. Reg. at 49,824.

157 TransCanada HPC, *supra* note 154, at 64-65.

158 *Id.* at 64.

159 RWP, *supra* note 61, at 3.

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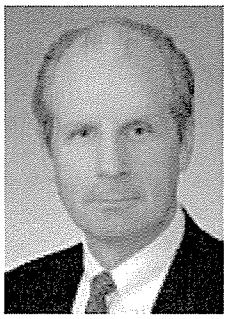

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Tom Campbell is a partner in Houston with over 30 years of experience in energy and environmental law and is the leader of the firm's Crisis Management team. His environmental practice includes counseling and litigation; working with both federal and state agencies on environmental issues such as permitting, enforcement, investigations, compliance and reviews in relation to waste, wastewater, water, natural resources damages and Endangered Species Act.

As the head of Crisis Management, Mr. Campbell counsels U.S. and multinational corporations facing catastrophic financial and reputational loss or losses associated with a crisis in various industries. Typically, these matters require a multidisciplinary response involving a public relations, government relations and litigation.

Mr. Campbell's global perspective and emphasis on strategic planning and policy are reflective of his experience in Washington, D.C. as the former General Counsel of the National Oceanic and Atmospheric Administration (NOAA). There he played a key role in the United States government's response to the Exxon Valdez oil spill crisis. He also led the federal assessment of the natural resource damage claim for that spill, and after playing a key role in its negotiation, signed the $1 billion settlement.

Mr. Campbell specializes in representing foreign clients with significant regulatory problems in the United States. Mr. Campbell's extensive regulatory work experience includes serving as the multidisciplinary crisis management team leader that advised a 10% leaseholder of the Macondo well on a billion dollar settlement related to the 2010 Deepwater Horizon accident and oil spill in the Gulf of Mexico. Mr. Campbell also served as a client team leader for Teck Metals in a "historic" cross-border contamination case involving claims of discharges in Canada affecting the Columbia River in the U.S.

Mr. Campbell has experience testifying before Congressional committees and participating in White House and cabinet-level briefings. Mr. Campbell's articles have appeared in several law, economic and technical publications.

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Honors & Awards

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Speaking Engagements

"Bringing Sound Technical Principles to Fruition within Legal and Administrative Regimes," DecomWorld's 7th Annual Decommissioning & Abandonment Summit 2015, March 19, 2015, Houston, TX.

Panelist, "Principles of Crisis Management from a Legal Perspective", webinar, March 3, 2015.

"Crisis Management: Dealing with a Cyber-attack" Presentation to the American Petroleum Institute, Fall Law Committee Meeting, October 3, 2014, Washington, DC.

Co-Moderator, "Crisis Management/Disaster Preparedness," Corporate Counsel's 25th Annual General Counsel Conference, June 5, 2013, New York, NY.

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External Publications

Protecting the Lesser Prairie Chicken Under the Endangered Species Act: A Problem and an Opportunity for the Oil and Gas Industry, *Texas Environmental Law Journal*, Authors: Thomas A. Campbell, Brad Raffle, Anthony B. Cavender, Norman F. Carlin, 4/2/2015

Corporate Governance: A Practical Guide, Authors: Thomas A. Campbell, Nicholas M. Krohn, Fusae Nara, Stella Pulman, January 2015

Carbon Capture and Storage Project Development, *Texas Environmental Law Journal*, Authors: Thomas A. Campbell, Robert A. James, Julie H. Mayo, Spring 2008

Firm Publications

The Fish and Wildlife Service Lists the Lesser Prairie-Chicken as a Threatened Species Under the Endangered Species Act, Authors: Brad Raffle, Thomas A. Campbell, Anthony B. Cavender, Nicholas M. Krohn, 4/17/2014

Crisis Management: Loss Management and Emergency Response, Author: Thomas A. Campbell, 2013

Crisis Management: Emergency Response, Author: Thomas A. Campbell, 2013

Environmental Perspectives on the Pipeline Development Hypothetical

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I. Introduction

This paper addresses the various areas that the environmental parties may look at when evaluating the authorization of a liquids pipeline route, including the issuance of a Section 404 permit, NEPA review, and endangered species review. Some of those areas are directly related to the Clean Water Act and Section 404, such as whether the wetlands at issue are jurisdictional, whether the permit applicant has chosen the least environmentally damaging practicable alternative, or whether mitigation proposed was adequate. Others are related to other federal statutes such as NEPA; when projects are larger in scope, for example, cumulative impacts can be at issue. Environmental parties learn fast, and have become increasingly sophisticated with their tactics of utilizing public comments to highlight problem areas in permitting, and litigating under Section 404 or the National Environmental Policy Act ("NEPA").

I was tasked to discuss these issues from the perspective of an "environmentalist" and "environmental protection." I have worked on the so-called "environmental" side of the docket for many years, and the majority of the clients I have represented consist of recognized environmental non-profits, local citizen-formed associations, or individual landowners and citizens. However, other clients are landowners or corporations, large and small, whose interests may or may not be traditionally environmental. For example, some landowners who feel their property interests are going to be impacted by nearby activities are willing to use environmental laws to protect their own interests against outside impacts. The point being, that the "environmental" perspective is sometimes more diverse than many people think.

II. Environmental Perspectives on Wetlands and NEPA

A. Jurisdictional Wetlands and the 2015 Rules

The threshold question of course is whether a wetland is in fact jurisdictional and thus regulated by the U.S. Army Corps of Engineers ("Corps"). Often, potential clients will inquire with some confusion about whether a particular wetland, which is to be filled as part of a development, can be the subject of a lawsuit. Both consultants and lawyers who have been involved in wetlands issues for anytime longer than a few years will likely well understand the confusion. Thus potential clients often need to be counseled on the difference between a jurisdictional and non-jurisdictional wetland.

On June 29, 2015, the EPA and Corps published the final rule for identifying jurisdictional wetlands, found primarily at 40 C.F.R. § 230.3.[1] The new rule defines the term "waters of the United States" and also provides a mechanism for analysis on a case-by-case basis. It also defines what is categorically not to be considered a water of the United States. The rule defines waters of the U.S.:

> (o)(1)(i) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
> (ii) All interstate waters, including interstate wetlands;
> (iii) The territorial seas;
> (iv) All impoundments of waters otherwise identified as waters of the United States under this section;
> (v) All tributaries, as defined in paragraph (o)(3)(iii) of this section, of waters identified in paragraphs (o)(1)(i) through (iii) of this section;
> (vi) All waters adjacent to a water identified in paragraphs (o)(1)(i) through (v) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters; and
> (vii) All waters in paragraphs (o)(1)(vii)(A) through (E) [*a list of specific wetland types, including Texas coastal prairie wetlands*] of this section where they are determined, on a case- specific basis, to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section;
> (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (iii) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (o)(1)(i) through (v) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section....[2]

The rule provides definitions for the terms "adjacent" and "significant nexus". The term *adjacent* means "bordering, contiguous or neighboring. a water identified in paragraphs (o)(1)(i) through (v) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like."[3] The term *significant nexus* means "that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (o)(1)(i) through (iii) of this section.[4] The term "in the region" means the watershed that drains to the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section.[5] For an effect to be significant, it must be more than speculative or insubstantial."[6]

One perspective holds that the language of the new rule reasonably implements what the Supreme Court has already expounded upon in recent case law (such as *Rapanos, SWANCC, and Riverside Bayview*). The revised definitions bring increased clarity and certainty regarding the Clean Water Act jurisdiction, maintains existing agricultural exemptions and adds new

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[1] Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37054 (June 29, 2015).
[2] 80 Fed. Reg. at 37116.
[3] 80 Fed. Reg. at 37116–17.
[4] 80 Fed. Reg. at 37117.
[5] *Id.*
[6] *Id.*

exemptions. Once implemented, wetlands practitioners will likely find it an improvement over the old rule, even if their clients disagree. However, the new rule is unlikely to help the non-expert public understand whether any particular wetland is jurisdictional or not, and frankly, that was not EPA's intent. A jurisdictional determination will always be a case-by-case assessment of the legal, technical and scientific factors.

There has been significant opposition to EPA's new definition, with some employing vastly inflated rhetoric to convince the public that EPA is expanding jurisdiction and engaging in a land grab. "The ... rule may be one of the most significant private property grabs in U.S. history," and EPA is trying to "take another step toward outright permitting authority over virtually any wet area in the country." said Louisiana Sen. David Vitter, the top Republican on the Senate Environment and Public Works Committee. This sort of rhetoric creates a deep misunderstanding and unrealistic expectations even amongst those environmental interests who hope to protect wetland resources. This is further compounded by the public's increasing use of online data sources such as the National Wetlands Inventory and Wetlands Mapper maintained by the U.S. Fish & Wildlife Service.[7] When the public accesses the USFWS data, there is no warning that the USFWS definition of "wetland" is broader than the definition of "wetland" in the CWA, and that the maps in no way related to jurisdictional wetlands. In short, confusion will continue, but over time, most will learn that the refined definitions are not a dramatic expansion of jurisdiction.

The State of Texas filed two lawsuits—one in the Federal District Court, of the Southern District, Texas, and one in the Fifth Circuit Court of Appeals—within hours of the publication of the new rule in the Federal Register. It is likely that these lawsuits will be consolidated with other similar challenges in the DC Circuit.

B. Project purpose and practicable alternatives under the 404(b)(1) Guidelines

Environmental parties sometimes attack over whether a permit applicant has chosen the least environmentally damaging practicable alternative, and whether the alternatives analysis is adequate.

The Section 404(b)(1) Guidelines provide the regulatory framework. They state that no discharge activities are permitted "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem."[8] "An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered."[9] "When a basic project purpose is not water dependent and involves discharge into a wetland, two presumptions relevant to the consideration of alternatives apply: "[1] practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise," and "[2] all practicable alternatives to the proposed discharge which

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[7] http://www.fws.gov/wetlands/

[8] *Gouger v. U.S. Army Corps of Engineers*, 779 F.Supp.2d 588, 610 (S.D. Tex. 2011) (citing 40 C.F.R. § 230.10(a)).

[9] 40 C.F.R. § 230.10(a)(2).

do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."[10]

Environmental parties may look at the project purpose and whether or not it has been defined too narrowly. The inquiry into the project purpose is a first step. However, "the definition of a project purpose may not be used by the sponsor as a tool to artificially exclude what would otherwise be practicable alternatives to the project, in other words, the sponsor's project purpose must be 'legitimate.' Thus, the project purpose may not be defined so narrowly that it makes what is a practicable alternative appear impracticable."[11] Thus, courts have "cautioned against defining a project too narrowly."[12] At the same time, "the Corps cannot ignore a sponsor's genuine and legitimate conclusions regarding the importance of a proposed project."[13] Courts are not always sympathetic to challenges of the project's purpose but this challenge nonetheless is a common area of attack.[14]

In terms of delineating practicable alternatives that fit within the project purpose, both environmental parties and courts often look for conclusory statements that are not supported with ample justification.[15] Thus, if the administrative record shows the Corps making unsupported assumptions which are not adequately explained in the record, then this can be an area of interest for environmental plaintiffs.[16]

C. Mitigation

Compensating for the loss of wetland resources through mitigation "is an important aspect of the review and balancing process or many ... permit applications."[17] Section 404(b)(1) of the Guidelines requires "appropriate and practical compensatory mitigation ...for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required."[18] When mitigation for a development project has been insufficient, this can be a good target for environmental parties.

Environmental plaintiffs are becoming increasingly knowledgeable about mitigation. It has been a consistent, if not always successful area for litigation.[19] And although it is not always a fruitful area of litigation, it can be a way to delay the permitting process when environmental advocates protest the amount and/or quality of the mitigation offered by a permit applicant. As permit applicants are well aware, the Corps has a general policy of not saying how much mitigation is

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[10] 40 C.F.R. § 230.10(a)(3); 230.3(q–1); 230.41.
[11] *Gouger,* F. Supp. 2d at 604.
[12] *Id.*
[13] *Id.*
[14] *Id.* at 606 (collecting cases).
[15] *See, e.g., Sierra Club v. Flowers*, 423 F. Supp. 2d 1273, 1360 (S.D. Fl. 2006) ("Conclusory remarks ... do not equip a decision-maker to make an informed decision about alternative courses of action or a court to review the Secretary's reasoning."), *vacated* 526 F.3d 1353 (11th Cir. 2008).
[16] *See id.* (noting that "the Corps made several assumptions, and none are adequately explained in the ROD or elsewhere in the administrative record.").
[17] 33 C.F.R. § 320(4)(r)(1).
[18] *City of Shoreacres v. Waterworth*, 332 F. Supp. 2d 992, 1017 (S.D. Tex. 2004) *aff'd*, 420 F.3d 440 (5th Cir. 2005) (citing 40 C.F.R. § 230.10(d)).
[19] *E.g., Airport Communities Coalition v. Graves*, 280 F. Supp. 2d 1207, (W.D. Wash. 2003) (environmental plaintiffs extensive challenge to mitigation plan was rejected and Corps approval of offsite mitigation was upheld by court).

required for a particular permit application, leaving applicants to rely upon the several methodologies and broads ranges of mitigation ratios in the guidance documents. This "guessing game" provides a great opportunity for environmental parties who comment on permit applications to consistently commend that mitigation is inadequate, forcing applicants to respond and creating some uncertainty.

D. NEPA and Cumulative Impacts

When the Army Corps issues a Section 404 permit, the National Environmental Policy Act ("NEPA") is triggered.[20] NEPA law can provide a fruitful area for environmental plaintiffs to pursue in litigation. "NEPA was intended to reduce or eliminate environmental damage and to promote 'the understanding of the ecological systems and natural resources important to' the United States."[21].

NEPA is procedural, but still has teeth. "NEPA imposes procedural requirements on federal agencies, requiring agencies to analyze the environmental impact of their proposals and actions."[22] NEPA's central requirement is that federal agencies must, except in certain qualifying situations, complete a detailed environmental impact statement ("EIS") for any major federal action significantly affecting the quality of the human environment.[23]

Regulations have been promulgated to provide guidance on the NEPA review process. NEPA requires an agency to produce a full EIS only where the agency proposes to undertake a project that qualifies as a "major Federal action" and only when that action "significantly affect[s] the quality of the human environment."[24] A "major Federal action" is defined as "actions with effects that may be major and which are potentially subject to Federal control and responsibility."[25] Effects include direct effects "which are caused by the action and occur at the same time and place," and indirect effects "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[26] "Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."[27] The regulations state that "[e]ffects and impacts as used in these regulations are synonymous...[and] [e]ffects includes ecological..., aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative."[28]

Frequently, for projects that entail the dredge or fill of only a few small wetlands, the Army Corps will issue a Finding Of No Significant Impact ("FONSI"), meaning that no further analysis under NEPA is required by the federal agency and no EIS is required. Then the Corps' Statement of Findings (a decision document issued in connection with a 404 permit) will typically contain a

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[20] *See Sierra Club v. Sigler*, 695 F.2d 957, 967 (5th Cir. 1983) (holding that the decision as to whether or not to issue a § 404 permit must be reviewed under NEPA).
[21] *Dep't of Transp. v. Public Citizen*, 541 U.S. 752, 756 (2004) (quoting 42 U.S.C. § 4321))
[22] *O'Reilly v. U.S. Army Corps of Engineers*, 477 F.3d 225, 228 (5th Cir. 2007) (quoting *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756–571 (2004)).
[23] *Id.* (*citing* 42 U.S.C. § 4332(2)).
[24] *O'Reilly*, 477 F.3d at 241 (citing 42 U.S.C. § 4332(2)(C)).
[25] 40 C.F.R. § 1508.18.
[26] 40 C.F.R. § 1508.8.
[27] *Id.* § 1508.8(b).
[28] *Id.*

short statement on cumulative impacts, such as: "The cumulative effects on the aquatic ecosystem are insignificant."

However, when the Army Corps has inadequately considered cumulative impacts, then this is an area for environmental plaintiffs to pursue in litigation. This is particularly true in regional areas that have seen much wetland loss or are otherwise vulnerable to environmental impacts due to increased adverse impacts to the wetland resources over time.

1. Cumulative impacts law

A project's cumulative impacts are among the critical considerations in the Corps' NEPA review.[29] The CEQ's regulations define the meaning of cumulative impacts.[30] Under the regulations, a project's cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."[31] "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."[32]

The Fifth Circuit has held that "a consideration of cumulative impacts must also consider 'closely related and proposed or reasonably foreseeable actions that are related by timing or geography.'"[33] This can be an important area of focus for environmental plaintiffs. Thus, cumulative impacts for a project may include related surrounding development even if done by other private developers.

The Fifth Circuit has also held that "a meaningful cumulative-effects study must identify: (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate."[34]

Fritiofson is still good law. The negative history indicated on Westlaw/Lexis for *Fritiofson* is not for any proposition related to the court's cumulative impact discussion. As explained in *Sabine River Authority v. U.S. Dep't of Interior*, 951 F.2d 669, 677–78 (5th Cir. 1992), the Supreme Court (in *Marsh*, 490 U.S. 360) subsequently held that the standard for reviewing an agency decision not to prepare an EIS was "arbitrary and capricious," rather than "reasonableness," which the Fifth Circuit had used in *Fritiofson*.

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[29] *See O'Reilly*, 477 F.3d at 228; *Sierra Club v. U.S. Army Corps of Eng'rs*, 645 F.3d 978, 991 (8th Cir. 2011); 33 C.F.R. Part 325 App'x B (7)(b) (discussing the Corps' NEPA implementation procedures related to EAs).
[30] 40 C.F.R. § 1508.7.
[31] *Id.*
[32] *Id.*
[33] *O'Reilly*, 477 F.3d at 234 (citation omitted).
[34] *Fritiofson v. Alexander*, 772 F.2d 1225, 1245 (5th Cir. 1985).

The CEQ regulations state that "[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment." Thus, cumulatively significant impacts require an EIS.[35]

2. Example: Wetlands on Galveston Island

An example of the use of cumulative impacts law is a lawsuit over development on the west end of Galveston Island. In 2008, in *Galveston Beach to Bay Preserve et al. v. U.S. Army Corps of Engineers*[36], multiple plaintiffs sued the Army Corps of Engineers over the issuance of permit necessary for a canal home development called Anchor Bay, which was one of many developments proposed on the barrier island. The plaintiffs alleged that Army Corps had not considered the cumulative impacts of the Anchor Bay project in combination with other past, present, and reasonably foreseeable development projects on the west end of Galveston Island. The federal district court agreed.

In the case, the court took note of several impacts identified by the Corps in the agency record; among them, the "dramatic loss" of wetlands on west Galveston since the 1950s, the loss of prairie uplands associated with the Anchor Bay development and other nearby residential development, and the coastal hazards associated with development on a barrier island. In the Corps' decision document, the Corps summarily concluded that the impacts were not significant, and the district court held that the Corps' "conclusion as to the significance of cumulative impacts in light of these [*Fritiofson*] factors is sorely lacking."[37] The court remanded the case to the agency to correct the deficiencies of the analysis.

Of note, the agency later submitted a corrected NEPA analysis. Then, the court concluded that the Corps had provided a "sufficiently detailed explanation of its conclusion regarding cumulative impacts" in compliance with NEPA, and the court dissolved the earlier injunction.[38]

3. Example: Wetlands on Katy Prairie in West Houston

Another example is development in the Katy Prairie area west of Houston. In 2011, in *Sierra Club v. U.S. Army Corps of Engineers*,[39] the Sierra Club sued the Army Corps of Engineers over the issuance of a Section 404 permit for wetlands destruction related to construction of Segment E of the Grand Parkway (Highway 99). Sierra Club alleged that, if built, Segment E and the cumulative impacts from it (*i.e.*, associated urban development) within the Addicks Watershed necessarily would increase stormwater runoff entering Addicks Reservoir because the wetlands resources were no longer available to function as retention features to absorb the stormwater (instead there would be concrete impervious cover). The cumulative result would be to increase the flooding dangers and the risk of catastrophic dam failure of Addicks Dam. The Sierra Club alleged that no federal agency—not the Corps or the Federal Highway Administration—had ever analyzed whether increased runoff as a result of Segment E and its associated development would adversely impact Addicks Reservoir, as required by NEPA, in any environmental review.

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[35] 40 C.F.R. § 1508.27(b)(7).
[36] Civil Action No. G-07-0549 (S.D. Tex. 2009).
[37] *Galveston Beach to Bay Pres. et al. v. U.S. Army Corps of Engineers* (Civil Action No. G-07-0549), docket entry #85, March 11, 2009.
[38] *Galveston Beach to Bay Pres. v. U.S. Army Corps of Engineers*, No. G-07-0549, 2010 WL 3362266, at *6 (S.D. Tex. Aug. 25, 2010).
[39] Civil Action No. 4:11-cv-003063 (S.D. Tex. 2011).

The federal district court agreed, holding that the "Corps did not adequately consider and address cumulative effects when making its conclusions about no adverse effects on Addicks Reservoir and Dam."[40] The court stated that the "the Corps was required to consider other actions—past, proposed and reasonably foreseeable—that have had or are expected to have impacts in the same area [and] the impacts or expected impacts from these other actions," as well as "the overall impact that can be expected if the individual impacts are allowed to accumulate."[41] The district court observed that the Corps had acknowledged that future development was reasonably foreseeable due to the Grand Parkway's construction but the Corps had failed to take the future development into account in its impacts analysis, and the court held this to be arbitrary and capricious.

E. Resource agencies – example - Endangered Species

The Corps frequently consults with other resource agencies. The possibility that endangered species exist and utilize the wetlands at issue is another possible topic in which environmental parties may take an interest. In other words, environmental parties may not strictly focus on the Army Corps when submitting comments about problem areas in permit applications but also direct comments to other agencies such as U.S. Fish & Wildlife Service, or Texas Parks and Wildlife Department. This strategy can be viewed as an attempt to bootstrap the importance of the environmental comments by assisting state or federal agencies with their own comments. The environmental parties may seek to highlight an issue, such as information based upon local knowledge of a particular site, that otherwise would not be well known to the agency staff. It is also believed that comments from the resource agencies garner more attention from the Corps and from the applicant.

F. Aquatic Resources of National Significance and the EPA

Finally, in more atypical cases, a development project may be sufficiently large in terms of wetlands destruction that the EPA takes an interest. EPA's particular interest in these circumstances lies in what is called "Aquatic Resources of National Importance" or ARNI. Pursuant to a 1992 MOA reached by the EPA and the Army Corps pursuant to Section 404(q) of the Clean Water Act,[42] the EPA can place a higher level of scrutiny on permits that affect ARNI.[43] If a permit affects ARNI, the EPA can elevate review to the national Department of the Army in Washington D.C., and, if the agencies disagree on this designation, refer the dispute to the Council on Environmental Quality.

In a 404(q) dispute resolution process factsheet, the EPA provided a list of factors used in identifying ARNIs: economic importance of the aquatic resource, rarity or uniqueness, and/or importance of the aquatic resource to the protection, maintenance, or enhancement of the quality of the Nation's waters.[44] These factors reflect the general point that all types of aquatic resources have functions and values that vary in degree of importance. ARNIs are those areas

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[40] *Sierra Club v. U.S. Army Corps of Engineers*, Memorandum and Order, Doc. # 104, at 30 (August 22, 2012).
[41] *Id.* (citing *Fritiofson*, 772 F.2d at 1245).
[42] 33 U.S.C. § 1344(q).
[43] *Available at* http://water.epa.gov/lawsregs/guidance/wetlands/dispmoa.cfm.
[44] *Available at* http://water.epa.gov/type/wetlands/outreach/upload/404q.pdf.

that have particular economic importance, are particularly rare or otherwise unique, or are particularly important to the protection, maintenance, or enhancement of water quality.

The steps in a 404(q) dispute resolution process are detailed in the 1992 MOA (and have been modified by three subsequent Memorandums in 2002, 2006 and 2008). First EPA notifies the Corps District during the regular permit comment period that the project "may affect" ARNIs. The project applicant then has less than 25 days to respond because EPA must issue its "will affect" letter within 25 days after the close of the comment period. The Corps District must then notify the EPA Region that it intends to proceed five days before it issues the permit, and the Region then decide the elevate the dispute to EPA Headquarters within 15 days at which time the permit is held in abeyance. EPA Headquarters may then seek higher review of the District's permit decision by the Assistant Secretary of the Army (Civil Works), after which EPA decides whether to exercise its 404(c) veto authority.

Sometimes, environmental interests have tried to tip EPA's hand, and write their own letters expressing a concern about ARNI. Such letters may be addressed directly to the EPA Region and ideally would be sent in advance of the Corps public comments period to give EPA sufficient chance to review the issue. However, the multiple steps in the 404(q) process provide many opportunities to influence EPA's decisions. One example is a very detailed twenty-seven page letter from a Minnesota environmental group, WaterLegacy to EPA Region 5 (Sept. 14, 2010).[45] Region 5 had already issued a "may affect" letter in response to a Corps Draft Environmental Impact Statement on the PolyMet NorthMet open pit copper sulfide mine. Designation of receiving waters as an ARNI is a factual determination. The WaterLegacy letter details the important values of the Partridge River Watershed aquatic resources related to sustaining rare and endangered species, biodiversity, downstream water quality—including municipal water quality, flood control, culturally significant wild rice and fishery resources— and the national and international significance.

Following the 1992 MOA, the EPA has issued elevation request letters sparingly.[46] This is consistent with language in the MOA, which states that, due to the delays associated with the 404(q) process, "every effort will be taken to ensure that the process under paragraph 3(b) of [Part IV] will be initiated only when absolutely necessary."[47]

To give an example: in 2009, the EPA requested elevated review of a permit for a phosphate mining operation in North Carolina.[48] The 15,100 acre project area was located adjacent to the Pamlico River, which is part of the nationally significant Albermarle Pamlico Estuary Complex. The proposed mine involved activities within nearly 11,500 acres that would result in direct adverse impacts to approximately 3,953 acres of wetlands and 25,727 linear feet of streams over a fifty year period. The project would have represented the single largest wetland impact ever authorized under the Clean Water Act in North Carolina. In its elevation request letter, the EPA noted that it was particularly concerned with direct impacts to 271 acres of non-riverine hardwood wetland forest that had been designated as a Nationally Significant Natural Heritage

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[45] http://waterlegacy.org/sites/default/files/Regulation-Enforcement/ARNI/ARNI-WaterLegacy_EPA_Letter09.14.2010.pdf

[46] *See, e.g.,* http://water.epa.gov/lawsregs/guidance/wetlands/404q.cfm (Chronology of EPA's 404(q) actions).

[47] 1992 MOA at IV.2.

[48] Elevation Letter from Michael H. Shapiro, Acting Assistant Administrator, EPA to the Honorable John Paul Woodley, Jr., Assistant Secretary of the Army (Civil Works), 1 (April 3, 2009).

Area by North Carolina. The project's magnitude, coupled with its impact to areas of hardwood wetland forest that had been specially designated as nationally significant, justified elevated review in order to minimize unacceptable adverse effects to aquatic resources that were clearly of national importance.

In other instances, the EPA has applied the ARNIs term to the Chesapeake Bay, vernal pools, sub-alpine fens, priority habitat for migratory birds, essential fish habitat for federally managed fisheries, and seagrass. The EPA has also applied the term to wetlands, but these wetlands have had characteristics that made them unique, rare, or particularly important in some way.

III. Conclusion and Recent Developments

Because the environmental parties will be interested in whether there is a jurisdictional hook on a development project, it is of course critical for there to be an initial evaluation of the existence of jurisdictional wetlands. If a developer overlooks the need for a Section 404 permit, environmental parties are likely to alert the Corps. And if a development is proposed in an area that has seen regional wetland loss and associated environmental impacts, it is important for developers to be aware that these projects will receive greater scrutiny from environmental groups. As stated, the cumulative impacts of a project may be a fruitful area for litigation. The adequacy of mitigation can be another area for an environmental practitioner to seek the delay of a wetlands 404 permit. The environmental parties are often resigned to the fact that the Corps is likely to eventually issue the 404 permit, but any delay does slightly improve the chance that the project will change or be abandoned. To minimize the opportunity for litigation, very careful adherence to mitigation requirements and other aspects of the 404(b)(1) guidelines is good practice.

Over the past decade, the amount of environmental information freely available online has increased tremendously. And interested citizens and landowners have learned how to make use of these sources. For example, many have learned how to use the U.S. Fish & Wildlife Service's National Wetlands Inventory ("NWI") to investigate the presence of wetlands on a project location.[49] There is sometimes confusion because this federal database does not distinguish between jurisdictional and non-jurisdictional wetlands. In one recent case, a new client was concerned about a proposed multi-unit development on an adjacent 12 ac property that would place a four-story building just a few feet from his property line, towering over his backyard. He came to us with the maps of the NWI showing wetlands at this location, and he had found out that the developer was not seeking a 404 permit. We explained to him that not all wetlands are jurisdictional, and that for these to be jurisdictional, there would have to be a significant nexus with waters of the U.S.. The next weekend, after a few rainy days, he sent me photographs of a "significant nexus," namely water flowing out of the wetlands, across a grassy area and jogging trail, into a drainage ditch that flowed a few hundred feet before entering Clear Lake. We documented all this in a letter to the Corps, copied to the developer. Shortly afterwards, we received news that the developer was re-evaluating the project design to try to avoid the wetlands completely. Courts may struggle to determine what is a significant nexus, but sometimes it is quite simple.

Pipelines are most frequently constructed under the Corps' Nationwide Permit No. 12. NWP 12 authorizes activities required for the construction, maintenance, repair, and removal of utility

[49] http://www.fws.gov/wetlands/data/mapper.HTML

lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than ½-acre of waters of the United States for each single and complete project. Companies try to avoid having to apply for specific 404 permits by selecting a route that avoids wetlands, or by using directional drilling to bore beneath waters and wetlands that cannot be avoided. In one recent matter, a company planned to drill beneath a large Texas river. The riparian landowner granted a subsurface easement for the installation of one pipeline, but because the company planned no surface work other than initial surveys, the easement agreement was silent as to surface access. The easement agreement was negotiated between the landman (on behalf of the company) and the landowner, and contained some specific provisions requested by the landowner. The landowner contacted us after large quantities of drilling mud escaped the borehole, migrated to the surface and began flowing into springs and cypress wetlands connected to the river. These discharges were definitely not within the scope of the Nationwide Permit and were a very obvious violation of the Clean Water Act.

The discharges persisted as the company struggled for four months to complete the pipeline crossing, eventually abandoning one pipe in place and drilling a second bore. The company's lack of surface access rights to their easement placed it at a great disadvantage because the landowner was able to control access and dictate the manner of the cleanup and remediation work and able to reach a favorable settlement at the end of the day. We now frequently see landowners swapping information about pipeline easement clauses more favorable to the landowner. Company representatives or landmen are sometimes all to eager to agree to these clauses requested by landowners because they appear relatively innocuous and the company is usually eager to avoid resorting to eminent domain. We have seen landowner-clauses with liquidated damages for trash, gates left open, locks or fences cut, failure to give notice for access *etc*. Language for such clauses are readily accessible to landowners on websites and internet forums. We have seen landowners enforcing the liquidated damages, and usually it turns out that the company either did not know about the terms of the specific easement, or the company failed to inform the contractor working on that property. As landowners continue to negotiate their own terms for pipeline easements, companies may have to consider a better system for tracking the terms of each easement they acquire along the entire length of the route.

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Charles represents clients in state and federal court, and in matters before the Texas Commission on Environmental Quality, and the State Office of Administrative Hearings. Previous cases include challenges to wastewater and air permits, Clean Air Act citizens' suits, Endangered Species Act litigation, and NEPA litigation. He is an Adjunct Professor at the University of Houston Law Center, where he teaches classes in Texas Coastal and Ocean Law, Environmental Law, Endangered Species and Biodiversity Law, and Practice of Environmental Law.

Before entering the legal field, he worked for many years in Greece as a program leader on environmental projects that protected sea turtles and marine mammals in coastal areas. During this time, he participated in extensive efforts to design and establish protected areas, eventually resulting in a new National Park. As an independent consultant, he researched and wrote comprehensive management plans for seven Mediterranean protected coastal areas under contracts with the World Wildlife Fund and European Union funded initiatives.

27th Annual Texas Environmental Super Conference

DEVELOPMENT HYPOTHETICAL
"A Bird in the Hand is Worth Two in the Bush"

LIQUIDS PIPELINE DEVELOPMENT HYPOTHETICAL

Your client, Pied Piper Pipeline, approaches you with a new matter, seeking your help in obtaining all the necessary permits for constructing a midstream petroleum liquids pipeline. The proposed pipeline, which will be over 350 miles in length, will run from the northern part of the state to a refinery located on the coast in the southern part of the state. The refinery serves domestic markets throughout the Gulf Region as well as markets overseas.

Peter, Pied Piper's President, informs you that, based on the anticipated construction schedule and the delivery deadlines included in the contract with the refinery, he has allowed for two whole years to complete the permitting work, which seems like an eternity to Peter, so there shouldn't be any problems with the timing. He does, however, let you know that based on the desktop surveys, the proposed route chosen for the pipeline crosses a few areas that you may want to look into further.

- There's a National Forest just south of the northern terminus of the pipeline. The preferred route only crosses approximately 10 miles of the Forest, and would for the most part parallel an existing transmission line. Although going around the Forest is possible, it would add 80 miles to the length of the pipeline and involve several hundred additional property owners.

- Of course there are river, stream, and water crossings along the entire length of the line, but Peter mentions two specifically. The most direct route for the pipeline would cross a popular recreational lake, but Peter found a route that allows him to cross just below the dam where there is nothing but a series of old levees and inundated bottomlands. The second crossing he wanted to mention is of some kind of "scenic or recreational river," but he can't remember the name. Pied Piper has started its title work, and for some reason the United States seems to own the property around both crossings.

- Peter's not a big fan of the outdoors, but his consultant has told him there are apparently all kinds of wild animals running amok right in the areas he wants to put his pipeline. His consultant seemed concerned about several areas in particular. First, there's an area designated as critical habitat for some bird, but luckily the birds are only there two months out of the year. But prairie chickens can be found all over the place at all times of year. Second, there is an area with a number of freshwater springs and streams containing threatened snails and mollusks that live nowhere else in the world. And a rare carnivorous beetle that lives on dead birds and mice. Finally, there's some kind of endangered lizard that lives in the southern area of the pipeline, but the folks down there say you hardly ever see one because they blend in so well with the grass and dirt.

Endangered birds, snails, bugs, and lizards – can you believe that? What is the world coming to?

- Oh, and there may be some kind of rare bat that lives up in the National Forest too.

- One last thing. OK, two really. There's an area designated as a Historic District on the map, but with some tweaking they managed to run the pipeline just outside of boundaries of the District, so Peter assumes no problems there. And there are several reservations in the area belonging to federally recognized Tribes, but again Peter was able to skirt just outside all of the boundaries of the reservations.

- Almost as an afterthought, Peter tells you a funny story. The proposed route of the pipeline crosses one of the largest ranches in the state, and it's owned by a guy the Peter used to pick fights with in high school. They run into each other now and then, and still hate each other. Turns out the geek made a killing in some tech company in Austin, is now worth gazillions, and has retired to his ranch (except for some work he does now and then with a few environmental groups). But when Peter gets his certificate, he gets eminent domain authority and he's going straight through the guy's ranch. I'll tell you, is that guy ever mad.

- That's it. Peter wants to know what you think.

You somehow muster the willpower to avoid grabbing your emergency bottle of Tito's from the bottom desk drawer, and just stare at Peter.

- What environmental laws/issues/agencies will Pied Piper have to deal with?

- What are likely to be the controlling paths?

- How can you possibly get all this done in two years?

- Why did you ever quit dental school?

- What do you tell Peter?

V&E

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Biography

Mike Wigmore is a partner in the Environmental and Natural Resources Practice Group at Vinson & Elkins, located in the Washington, D.C. office.

Mike represents clients with respect to public lands and natural resources matters in court, before the Congress and before federal and state administrative agencies (including the U.S. Army Corps of Engineers, U.S. Forest Service, Bureau of Land Management, National Park Service, U.S. Fish & Wildlife Service, and the EPA) in matters arising under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Federal Land Policy and Management Act, Outer Continental Shelf Lands Act, National Forest Management Act, Clean Water Act, Oil Pollution Act (OPA), Rivers and Harbors Act and related state statutes.

Mike also represents clients in federal and state courts and before administrative agencies on a broad range of environmental permitting, compliance and enforcement defense issues. He has significant experience litigating matters under the Clean Water Act (CWA), Oil Pollution Act (OPA), Clean Air Act, Resource Conservation and Recovery Act (RCRA), and related state statutes. Mike has also litigated numerous cases relating to federal environmental and natural resources regulations in the U.S. Court of Appeals for the D.C. Circuit and the U.S. District Court for the District of Columbia.

Prior to commencing the practice of law in 1990, Mike was a nuclear engineer with the General Electric Company/Knolls Atomic Power Laboratory, where his responsibilities included plant operations and environmental compliance for a land-based naval nuclear submarine prototype.

Awards and Honors

- Leading lawyer in Environmental Law (Washington, D.C.), *Chambers USA, Best Lawyers, Legal 500 U.S.*

Education

- The George Washington University Law School, Juris Doctor, with high honors, Order of the Coif, 1990
- United States Merchant Marine Academy, Bachelor of Science, with highest honors, 1984

Ross Ramsey Executive Editor



Ross Ramsey is executive editor and co-founder of The Texas Tribune. Before joining the Tribune, Ross was editor and co-owner of Texas Weekly for 15 years. He did a 28-month stint in government as associate deputy comptroller for policy and director of communications with the Texas Comptroller of Public Accounts. Before that, he reported for the Houston Chronicle from its Austin bureau and for the Dallas Times Herald, first on the business desk in Dallas and later as its Austin bureau chief, and worked as a Dallas-based freelance business writer, writing for regional and national magazines and newspapers. Ross got his start in journalism in broadcasting, covering news for radio stations in Denton and Dallas.

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Booker has almost 20 years of experience as in-house counsel for the TCEQ. As the Senior Attorney for Air Quality, Booker is responsible for providing legal advice to executive management, the Air Permits and Air Quality Divisions of the Office of Air, and the Program Support Section and Monitoring Operations Division of the Office of Compliance and Enforcement. This includes counsel on interpretation of, and compliance with, the federal and state Clean Air Acts, and other federal and state statutes and rules. Prior to becoming a senior attorney in the Environmental Law Division, Booker was a senior attorney and staff attorney with the Litigation Division. Booker received his JD from the Texas Tech School of Law and an MBA from the Texas Tech Graduate School of Business. He received his BA in Economics from UT.