From: Knauss, Chuck [CKnauss@hunton.com]

Sent: 6/13/2018 4:40:24 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Invitation for tonight -- yes I know it's late...

Attachments: 2018 Bruce F Vento Public Service Award Invitation.s-c-c-c.pdf

Bill:

Please come tonight and share with others that might be interested. ! I hope you're available to swing by the Newseum this evening as the National Park Trust honors Senator Martin Heinrich (June 13th at 6:30 PM). As you know, I'm on the NPT board and our mission is very important to me — protecting high priority lands for the National Park Service and creating future park stewards, with a special emphasis on children from under-served communities. Each year we host the Bruce F. Vento Public Service Award event to honor an outstanding elected official and conservationist and celebrate NPT's accomplishments.

The invitation is below and attached. The short program will give you a chance to hear about the important and effective projects we have underway and the highlight of the evening is hearing directly from some over the under-served children in our programs. The event includes a reception with the **30-minute formal program starting at 7:00 PM**.

Best regards, Chuck



Public Service Assert Reception

2016 Ferrar av Congressional Committee

Here is a second or the second of the second

Bruce F. Vento Public Service Award Recipients

2018: Senator Martin Heinrich, New Mexico 2017: Senetor Lamar Alexander, Tennesee 2016: Congresswoman Betty McCollum, Minnesota 2015: Senator Rob Portman, Ohio 2014: Senator Ron Wyden, Oregon 2013: Congressman Mike Simpson, Idaho 2012: Senator Jeff Bingaman, New Mexico 2011: Senator Susan Collins, Maine 2010: Senator Mark Udall, Colorado 2009: Governor Arnold Schwarzenegger, California 2008: Senator Herry Reid, Nevada 2007: Congressman George Miller, California 2006: Senator John McCain, Arizona 2005: Senator Bob Graham, Florida 2004: Congressman John Lewis, Georgia 2003: Congresswoman Connie Morella, Maryland 2002: Congressman John F. Seiberling, Ohio 2001: Lt. Governor Lowell Thomas, Jr., Alaska



Senator Martin Heinrich

Regressenting New Mexico since 2013, Senator Heinrich serves on the Senato Committee on Energy and Natural Resources and the Subcommittee on National Parks. He also serves on the Senate Committee on Armed Services, the Senate Select Committee on Intelligence, and the U.S. Congress Joint Economic Committee.

Senator Heinrich's numerous accomplishments to protect our public lands include his work to help create the Colombine-Hondo Wilderness area, expand public access to the Vales Calders National Preserve, and establish the Manhattan Project National Historical Park. He also championed the creation of the Rio Grande del Norte National Monument and Organ Micontains-Cosen Peaks National Monument.

His dedicated bipartison efforts also help to connect families and kids to the great outdoors as demanstrated by his work as co-chair of the Senate Outdoor Recreation Caucus, aponsor of the Every Kid Outdoors Act and co-sponsor of the annual Kids to Parks Day Senate Repolation.

NATIONAL PARK TRUST

NPT's reinsics is preserving parks today, creating park stewards for temorrow in the 35 years since NPT was established, the non-profit organization has completed more than 60 land acquisition, restoration, and mitigation projects in 30 states, 1 U.S. Territory and Washington, D.C. including 48 National Park Service projects. In 2001, NPT jourched its nationally recognized Buddy Bison Programs which corrently support more than 200 Title I achieves across the country. Since 2011, NPT has organized Kriss to Parks Day, an assurabitional celebration of America's parks bosted on the third Saturday in May, for more details about NPT, violit wave parks to start.

From: Weisiger, Katherine [kweisiger@hunton.com]

Sent: 6/4/2018 9:21:42 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Attachments:

Personal Matters / Ex. 6

Bill,

Personal Matters / Ex. 6

Katherine



Katherine B. Weisiger

Retirement Manager kweisiger@HuntonAK.com p 804.788.8423

Hunton Andrews Kurth LLP Riverfront Plaza, East Tower 951 East Byrd Street Richmond, VA 23219

HuntonAK.com

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 4/20/2018 12:10:43 AM **To**: bbrownell@hunton.com

Subject: Fwd: Southern Company is "Planning for a Low-Carbon Future"

Well, things sure have changed ...

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

Begin forwarded message:

From: "Horton, Melissa H." < MHIGGINS@southernco.com >

Date: April 19, 2018 at 7:36:25 PM EDT

To: "wehrum.william@epa.gov" <wehrum.william@epa.gov>

Subject: Southern Company is "Planning for a Low-Carbon Future"

Bill,

Today, Southern Company issued an environmental report titled "Planning for a Low-Carbon Future" on our <u>website</u>. The report reflects our continued commitment to serving customers and protecting the environment, while also responding to climate-related shareholder resolutions.

In the report, we establish an intermediate goal of a 50-percent reduction in our carbon emissions from 2007 levels by 2030 and a longer-term goal of low-to-no carbon operations by 2050. These goals are consistent with our existing business strategy and long-term, least-cost resource planning, which have already reduced our carbon emissions by approximately 36 percent since 2007. Achieving these goals is dependent on many factors, including natural gas prices, the pace and extent of technology innovation and state regulatory frameworks.

Southern Company remains committed to investing in the full portfolio of energy resources and research and development in order to continue providing clean, safe, reliable and affordable energy to the more than 9 million customers we are privileged to serve.

Please let me know if you have any questions. Thank you.

Melissa H. Horton



```
From:
             Gill, Julia Zemnick [jgill@hunton.com]
             7/11/2018 5:09:17 PM
Sent:
             Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group
To:
             (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]
Subject:
             Fwd: [ALACapChap] - Litigation Secretary
Attachments: image001.gif
Bill,
Here's another posting.
Julia Zemnick Gill
Senior ALG Team Manager
Begin forwarded message:
From: "Ball, Rachel" <rball@hunton.com<mailto:rball@hunton.com>>
Date: July 11, 2018 at 1:07:02 PM EDT
To: "Gill, Julia Zemnick" <jgill@hunton.com<mailto:jgill@hunton.com>>
Subject: FW: [ALACapChap] - Litigation Secretary
FYI...
From: Satchell, Kim Chin [mailto:support@lists.alacapchap.org]
Sent: Wednesday, July 11, 2018 12:50 PM
To: alacapchap@lists.alacapchap.org<mailto:alacapchap@lists.alacapchap.org>
Subject: [ALACapChap] - Litigation Secretary
Hi!
We are currently interviewing for a litigation secretary. Please forward the direct link to our job
board to any interested parties.
McGlinchey Stafford Job Board<https://urldefense.proofpoint.com/v2/url?u=https-
    recruiting.ultipro.com_MCG1002_JobBoard_103b0156-2D4757-2D51b0-2Dd245-_
2D754c776002b0&d=DwMCAg&c=jxhwBfk-KSV6FFIot0PGng&r=NbP7TJabUigb1HNPGTMkiA&m=Xi-ODTUPZmHR2K_LBkp8q-
W9hUZ1tFHasv5KKAmj3Kc&s=xzYYRZu_bLvM_u7V2zBzfl76o2vtLUCqGoNefxvv9XM&e=>
Thanks for your help!
Kim Chin Satchell | Regional Administrator
direct:
fax:
mobile:
office:
office:
(646) 362-4090
    Ex. 6
112 W 34th St, Ste 1515 | New York, NY 10120
1275 Pennsylvania Ave NW, Ste 420 | Washington, DC 20004
[McGlinchey Stafford]<https://urldefense.proofpoint.com/v2/url?u=http-
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www.cafalawblog.com<https://urldefense.proofpoint.com/v2/url?u=http-
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Alabama California Florida Louisiana Mississippi New York Ohio Tennessee Texas Washington, DC

www.mcglinchey.com<ahref="http://www.mcglinchey.com">www.CafaLawBlog.com<ahref="http://www.CafaLawBlog.com">www.CafaLawBlog.com<ahref="http://www.CafaLawBlog.com">http://www.CafaLawBlog.com

McGlinchey Stafford, PLLC in Alabama, Florida, Louisiana, Mississippi, New York, Ohio, Tennessee, Texas, and Washington DC and McGlinchey Stafford, LLP in California.

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Posted By: Kim Chin Satchell, Regional Administrator at McGlinchey Stafford Email Address: ksatchell@mcglinchey.com<mailto:ksatchell@mcglinchey.com>
Attachment Links: image001.gif (4 k)<https://urldefense.proofpoint.com/v2/url?u=http3A__www.alacapchap.org_p_fo_do_-3Fdownload-3D1-26fid-3D912&d=DwMCAg&c=jxhwBfk-KSV6FFIot0PGng&r=NbP7TJabuigb1HNPGTMkiA&m=Xi-ODTUPZmHR2K_LBkp8q-W9hUZ1tFHasv5KKAmj3Kc&s=454_4UExu-IYQYjeAntOHv8ut-5NYB_MgxhasZqOFrs&e=> Site Links: View post onlinehttp- $3A__www.alacapchap.org_p_fo_st_-3Fpost-3D1429-26anc-3Dp1429-23p1429\&d=DwMCAg\&c=jxhwBfk-12p1429-23p1429&d=DwMCAg\&c=jxhwBfk-12p1429-26anc-3Dp1429-23p1429&d=DwMCAg\&c=jxhwBfk-12p1429-26anc-3Dp1429-23p1429&d=DwMCAg\&c=jxhwBfk-12p1429-26anc-3Dp1$ KSV6FFIotOPGng&r=NbP7TJabuigb1HNPGTMkiA&m=Xi-ODTUPZmHR2K_LBkp8q-W9hUZ1tFHasv5KKAmj3Kc&s=vvtKsn8uykXdqPYUVXJiIEgFMD6OAH2iwZRUGhfjYWc&e=> View mailing list online<https://urldefense.proofpoint.com/v2/url?u=http-3A__www.alacapchap.org_p_fo_si_-3Ftopic-3D80&d=DwMCAg&c=jxhwBfk-KSV6FFIot0PGng&r=NbP7TJabuigb1HNPGTMkiA&m=Xi-ODTUPZmHR2K_LBkp8q-W9hUZ1tFHasv5KKAmj3Kc&s=2gpHJ2ddK8xn7zUF2dvS1xLDhxu1EpJaOi_XKt3xcjQ&e=> Start new thread via email<mailto:alacapchap@lists.alacapchap.org> Unsubscribe from this mailing list<mailto:alacapchap+unsubscribe@lists.alacapchap.org?Subject=Unsubscribe> Manage your subscription<https://urldefense.proofpoint.com/v2/url?u=http-3A__www.alacapchap.org_p_us_to_&d=DwMCAg&c=jxhwBfk-KSV6FFIot0PGng&r=NbP7TJabUigb1HNPGTMkiA&m=Xi-ODTUPZmHR2K_LBkp8q-W9hUZ1tFHasv5KKAmj3Kc&s=5YqbZcTjqIY5dX50E1h86u31FMjEAGvomedm47n_cac&e=>

This email has been sent to: rball@hunton.com<mailto:rball@hunton.com>

From: Weisiger, Katherine [kweisiger@hunton.com]

Sent: 6/25/2018 1:09:10 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject:

Ex. 6

Attachments: Personal Matters / Ex. 6

Bill,

Personal Matters / Ex. 6

Katherine



Katherine B. Weisiger

Retirement Manager kweisiger@HuntonAK.com p 804.788.8423

Hunton Andrews Kurth LLP Riverfront Plaza, East Tower 951 East Byrd Street Richmond, VA 23219

HuntonAK.com

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, June 21, 2018 7:38 PM

To: Weisiger, Katherine

Subject: FW: Spousal Consent

Personal Matters / Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 6/21/2018 11:38:26 PM

To: Weisiger, Katherine [kweisiger@hunton.com]

Subject: Personal Matters / Ex. 6 Attachments: scan_20180619191135.pdf

Personal Matters / Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

From: Landin, David [dlandin@hunton.com]

Sent: 7/9/2018 1:15:46 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Various topics

Bill,

So sorry about Scott Pruitt, which I know means that your group has been going way into overtime. Have meetings with client Tuesday and traveling tomorrow, but if a catch-up on general matters to get a sense of things is doable, let me know.

David.

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 6/19/2018 12:35:27 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Thursday Is National Selfie Day

With the approach of this national holiday on Thursday, it's my belief that the situation absolutely requires a really futile and stupid gesture be done on somebody's part. And I'm just the guy to do it.

Hope you enjoy.

Mike

http://www.charlotteobserver.com/opinion/op-ed/article213370799.html



Michael Kerrigan

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 4/13/2018 7:00:15 PM
Subject: I Don't (Wanna) Be Sedated

For many middle-age-appropriate surgeries, anesthesia is necessary. Mortifying yourself in front of complete strangers need not be.

Have a nice weekend and, with apologies to Joey Ramone, enjoy.

(For Charlotteans, it will be in the Sunday print if you'd rather wait for that.)

Mike

http://www.charlotteobserver.com/opinion/op-ed/article208802884.html



Michael Kerrigan

Partner

mkerrigan@HuntonAK.com pi_____Ex. 6___i bio | vCard

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 6/29/2018 10:16:31 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]
Subject: Save The Great American Family Road Trip

Ah, sweet summer memories of a time before seat belts. I hope you enjoy this, a father's glance at the rear-view mirror of history.

Mike

https://www.wsj.com/articles/save-the-great-american-family-road-trip-1530226143



Michael Kerrigan

Partner

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

Kerrigan, Mike [mkerrigan@hunton.com] From:

6/1/2018 12:50:48 PM Sent:

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Lessons Learned In Summer Jobs

This one is dedicated to my kid brother Ex. 6 my role model when it comes to grit and determination. Caution? Not so much. Enjoy.

Mike

https://www.wsj.com/articles/summer-jobs-teach-real-world-lessons-1527809051



Michael Kerrigan

mkerrigan@HuntonAK.com

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 3/30/2018 2:24:56 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: A Parent's Love On Good Friday

Happy Easter. I hope you enjoy.

Mike

http://www.foxnews.com/opinion/2018/03/30/parents-love-on-good-friday.html

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 3/19/2018 1:33:38 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Spring Break - Family Travel Tips

Friends, no need to thank me. I know you'd do the same for me. For Charlotteans, it will be in tomorrow's print edition if you'd rather wait.

Happy Spring Break. Enjoy the buffet!

Mike

http://www.charlotteobserver.com/opinion/op-ed/article205571034.html

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 5/11/2018 10:48:26 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Happy Mother's Day

To the mothers of rambunctious boys everywhere – and one mother in Virginia in particular – thank you.

Happy Mother's Day.

Mike

P.S. – Mom, this counts as your card.

https://www.wsj.com/articles/a-centerfold-and-a-lesson-from-mom-1525992696



Michael Kerrigan

Partner

mkerrigan@HuntonAK.com p **Ex. 6**

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 7/4/2018 11:29:33 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Sorry

Forgot to update Subject Line on the last one. Perils of sending before coffee.

Kerrigan, Mike [mkerrigan@hunton.com] From:

Sent: 7/4/2018 11:24:28 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: **NEXT ONE - Distro**

In praise of a friend. No big laughs in this one, just admiration. I hope you enjoy.

Happy Independence Day.

Mike

http://www.foxnews.com/opinion/2018/07/04/july-fourth-what-learned-from-friend-who-runs-toward-soundguns.html



Michael Kerrigan

Partner

mkerrigan@i-luntonAK.com p! **Ex. 6**

bio | vCard

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Field, Andrea [afield@hunton.com]

5/16/2018 9:56:05 PM Sent:

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: ACOEL Interview

might?

I have to leave by 6:30 this evening. If today doesn't work, is there any time tomorrow that

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Tuesday, May 15, 2018 8:18 PM

To: Field, Andrea

Subject: Re: ACOEL Interview

Hi Andy. Yes, Friday is still good. If you are available late tomorrow afternoon, maybe I can call you then?

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

On May 15, 2018, at 5:20 PM, Field, Andrea <a field@hunton.com> wrote:

Are we still a "go" for the interview this Friday, May 18? And if so, will you have time (no more than 10 minutes) between now and then to go over potential questions that you feel comfortable addressing? Thanks.

Andy Field

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, April 26, 2018 10:45 AM

To: Field, Andrea **Subject:** Tomorrow

Hi Andy. I had planned to come to your office tomorrow for the American College of Environmental Lawyers interview. But, I now will be out of town – need to travel to Memphis to take care of some family business. I still have time tomorrow, but will need to call in. Does that work for you? If so, what time is best? Also, I'd appreciate it if you could set up a call in number. Thanks.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 3/9/2018 9:47:32 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Saturday

I should have mentioned if this doesn't work, let me know I can make myself available.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, March 09, 2018 4:35 PM

To: Gill, Julia Zemnick Subject: Re: Saturday

Thanks Julia.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Mar 9, 2018, at 4:26 PM, Gill, Julia Zemnick < jgill@hunton.com > wrote:

Bill,

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, March 09, 2018 3:56 PM

To: Gill, Julia Zemnick **Subject:** RE: Saturday

Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404 From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Thursday, March 8, 2018 5:36 PM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov>

Subject: RE: Saturday

Hi Bill,

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, March 08, 2018 12:56 PM

To: Gill, Julia Zemnick **Subject:** Saturday

Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

From: Lynne Collins [COLLINS@api.org]

on behalf of Frank Macchiarola [MacchiarolaF@api.org]

Sent: 2/12/2018 5:18:17 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Atkinson, Emily [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=bb2155adef6a44aea9410741f0c01d27-Atkinson, Emily]; Shaw, Nena

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=2ae00b27ec1544ef8331567ce532bdd3-Shaw, Nena]; Grundler, Christopher

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d3be58c2cc8545d88cf74f3896d4460f-Grundler, Christopher]

Subject: API Letter 2.12.18
Attachments: API Letter 2.12.18.pdf

Please see the attached letter to Mr. William Wehrum from Frank Macchiarola, Group Director Downstream and Industry Operations with the American Petroleum Institute. Thank you.



Frank J. Macchiarola

Group Director Downstream & Industry Operations

1220 L Street, NW Washington, DC 20005-4070 USA

Telephone Fax Email Ex. 6 202-682-8051 MacchiarolaF@api.org

www.api.org

February 12, 2018

The Honorable William Wehrum Assistant Administrator U.S. Environmental Protection Agency Office of Air and Radiation 1200 Pennsylvania Avenue, NW Washington, DC 20460

Transmitted via email

Re: Renewable Fuel Standard Program: Requests for Waivers and Exemptions

Dear Assistant Administrator Wehrum,

The burden of the Renewable Fuel Standard (RFS) program impacts the entire refining sector with costs that are ultimately borne by consumers. For years, the American Petroleum Institute (API)¹ has recommended that EPA should establish RFS standards that are consistent with the ability of the fuels marketplace to consume the required volumes of renewable fuels. When the RFS volume standards exceed the limits of the fuel distribution system and the vehicle fleet, significant market disruptions occur, and the overall cost of the program increases. The economic impact of high volume standards is felt across the marketplace.

Recently, arguments have been made that certain obligated parties are experiencing economic harm and are structurally disadvantaged by the RFS. Two specific examples are: 1) RFS waiver requests submitted by the states of Pennsylvania, New Mexico, Texas, and Delaware²; and 2) reports of small refinery exemption petitions. API does not agree with these arguments. Any RFS volume reductions contemplated by the agency must maintain a level playing field in the marketplace, and must apply equally across the whole refining sector. The ongoing issues with the RFS program are structural in nature, apply to all regulated parties, and need to be addressed on a nationwide basis. API recommends that EPA should deny the state waivers and should not approve any small refinery exemptions.

¹ The American Petroleum Institute (API) is the national trade association that represents all aspects of America's oil and natural gas industry. Our more than 625 corporate members - from the large major oil and gas companies to the small independents - come from all segments of the industry. They are producers, refiners, suppliers, marketers, pipeline operators and marine transporters as well as service and supply companies that support all segments of the industry. They provide most of the nation's energy and are backed by a growing grassroots movement of more than 30 million Americans. As refiners and importers of transportation fuels, our member companies are obligated parties under the Renewable Fuel Standard (RFS) program and subject to its requirements.

² Pennsylvania – Wolf, Tom. "Petition for RFS Waiver Under CAA Section 211(o)(7)(A)(i)." November 2, 2017 New Mexico – Martinez, Susana. "Petition for RFS Waiver Under CAA Section 211(o)(7)(A)." November 22, 2017 Texas – Abbott, Greg. Letter to The Honorable Scott Pruitt. December 1, 2017 Delaware – Carney, John. "Petition for RFS Waiver under CAA Section 211(o)(7)(A)(i)." January 30, 2018

Regarding the state waiver requests, the Clean Air Act (CAA) provides EPA authority to waive the RFS requirements when the standards cause "severe harm to the economy or the environment" or when there is "inadequate domestic supply." The individual waiver requests rely on the claim of economic harm experienced by obligated parties in each state. Based on numerous studies and EPA's own analysis, individual refineries in these states are faced with the same compliance requirements as refineries in other states and are not disadvantaged based on their location. Furthermore, the RFS is an annual program that applies on a nationwide basis, excluding Alaska. There is no practical rationale for waiving the standard for a specific region or for a specific period. Granting state, region, or refinery specific RFS exemptions creates uncertainty and distorts the level playing field, resulting in harm for the non-exempted obligated parties. Therefore, EPA should deny these waiver requests.

For an individual small refinery, defined as a refinery whose average aggregate daily crude oil throughput does not exceed 75 thousand barrels per day (kbd), EPA may grant a temporary exemption from the annual RFS volume standards if compliance with RFS obligations will impose a "disproportionate economic hardship" on the refinery. According to news reports, several small refineries have submitted petitions based on this hardship. These arguments center on the high cost of acquiring RINs, which are used by obligated parties to demonstrate compliance with the RFS. However, RIN acquisition is just one of many factors that determine the economic performance of a refinery.

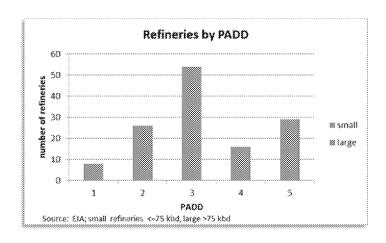
Several studies have concluded that RIN costs are largely recovered by refineries, both large and small, through the increased value of gasoline and diesel fuel they supply to the market. EPA's own analysis comes to the same conclusion. In EPA's <u>Denial of Petitions for Rulemaking to Change the RFS Point of Obligation</u>, the agency found that "while a merchant refiner is directly paying for the RINs they buy on the market, they are passing that cost along" and concluded that merchant refiners are not disadvantaged compared to integrated refiners in terms of their costs of compliance. This dynamic applies equally to small refineries as it does to merchant refiners and evidences the fact that the RFS program is not causing disproportionate harm on small refiners. Further, the decision also noted: "If exempted, [small refiners] could have a (potentially significant) financial advantage over parties that do have RFS obligations and this dynamic could result in an increasing number of small businesses entering this market." These points make clear that small refinery exemptions are unnecessary as all parties should be subject to the same regulatory costs as their competitors.

The Figure below shows that there are small refineries throughout the US. In PADD 4 for example, 15 out of 16 refineries have crude distillation capacity that does not exceed 75 kbd.

³ CAA 211(o)(7)

^{4 40} CFR Part 80.1441

Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency, Denial of Petitions for Rulemaking to Change the RFS Point of Obligation. EPA-420-R-17-008. November 2017.



Furthermore, PADD markets do not work in isolation. For example, refineries in PADD 3 supply products to PADD 1. EPA should ensure any reductions in the RFS volume obligations apply equally across the refining industry. Small refinery exemptions, especially when granted retroactively, introduce additional uncertainty and RIN market disruptions.

It is ultimately up to Congress to repeal or reform the RFS. Meanwhile, API seeks regulatory solutions that: are based on sound science; are achievable for regulated parties; are cost effective for the consumer; and, maintain a level playing field in the market. As the size of a refinery alone does not determine operational competitiveness in the marketplace, it is not appropriate for EPA to grant small refiner exemptions to the RFS program. Similarly, it is not appropriate to grant state petitions to waive the RFS program that are based on the premise that RIN acquisition adversely impacts small or merchant refiners, or to otherwise relieve these obligated parties of their obligations.

The best available remedy is for EPA to use its waiver authority to establish annual volumes that are reasonable, achievable, and fair for all RFS stakeholders. Granting individual requests for relief creates a distortion in the marketplace and threatens the integrity of the RFS program. API welcomes the opportunity to work with EPA to develop regulatory solutions to meet these goals.

API and our member companies appreciate your attention to these issues. If you have any questions or concerns, please contact me at (**Ex. 6**

Sincerely,

Frank J. Macchiarola Group Director

Downstream & Industry Operations

65.666

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 7/27/2018 11:32:06 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]
Subject: A Rugged Indoorsman Reflects On Bears

This is the time of year when many people voluntarily enter the woods and emerge days later, reenergized. I am not such a person.

Tongue in cheek? Perhaps. But that's where I'd like it to stay. Enjoy.

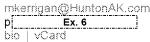
Mike

https://www.wsj.com/articles/bear-with-me-get-it-away-1532646189



Michael Kerrigan

Partner



Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Nolan, Robert M [robert.m.nolan@exxonmobil.com]

Sent: 5/23/2018 3:08:18 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: ExxonMobil Press Release

Attachments: ExxonMobil Release - EMBARGOED Until 8 AM CDT 05-23-2018.pdf

Good morning Bill \dots I thought you might find this of interest \dots

Regard, Robert

Office) Ex. 6 (Cell)

EMBARGOED UNTIL 8 AM CDT, WEDNESDAY, MAY 23, 2018

News Release

EXONMOBIL

EXXON Mobil Corporation

5959 Las Colinas Boulevard Irving, TX 75039-2298 972 940 6007 Telephone 972 940 6143 Facsimile

CONTACT: ExxonMobil Media Relations

(972) 940-6007

EMBARGOED UNTIL 8 AM CDT, WEDNESDAY, MAY 23, 2018

ExxonMobil Announces Greenhouse Gas Reduction Measures

- Methane emissions to drop 15 percent, flaring reduced by 25 percent by 2020
- · Improving industry-leading energy efficiency in refining and chemical manufacturing

IRVING, Texas – ExxonMobil today announced greenhouse gas reduction measures that are expected to lead to significant improvements in emissions performance by 2020, including a 15 percent decrease in methane emissions and a 25 percent reduction in flaring. The company also announced its intention to improve its industry-leading energy efficiency in refining and chemical manufacturing facilities.

ExxonMobil invests in lower-emission energy solutions such as cogeneration, flare reduction, energy efficiency, biofuels, carbon capture and storage and other technologies. ExxonMobil has spent more than \$9 billion on lower-emission energy solutions since 2000.

"We have a longstanding commitment to improve efficiency and mitigate greenhouse gas emissions," said Darren W. Woods, chairman and chief executive officer. "Today's announcement builds on that commitment and will help further drive improvements in our business."

ExxonMobil is undertaking a number of initiatives to significantly reduce methane emissions. XTO Energy's leak-detection-and-repair efforts and operational improvements at U.S. production and midstream sites have reduced estimated methane emissions across ExxonMobil operations by 2 percent in the past year. Combined with additional measures outside the U.S. focused on the most significant sources of methane, ExxonMobil expects to achieve a 15 percent reduction of methane emissions by 2020 compared with 2016.

ExxonMobil is one of eight global energy companies that supports guiding principles on methane reduction. The principles focus on continually reducing methane emissions, advancing strong performance across gas value chains, improving accuracy of methane emissions data and advocating sound policies and regulations on methane emissions. ExxonMobil is a founding member of the API's Environmental Partnership, which is focused initially on reducing methane and volatile organic compound emissions.

Efforts associated with oil and gas production and processing are expected to lower natural gas flaring across ExxonMobil operations by about 25 percent by 2020 compared with 2016. The most significant reductions are expected to occur in operations in West Africa and include use of third-party infrastructure.

ExxonMobil is a charter member of the Global Gas Flaring Reduction Public-Private Partnership, which is committed to developing commercial opportunities to reduce flaring. The partnership is comprised of oil-producing countries, international and state-owned oil companies and the World Bank.

Further greenhouse-gas emissions reduction efforts will target ExxonMobil's global refining and chemicals manufacturing network with the goal of improving existing industry-leading energy efficiency performance.

ExxonMobil is the most energy efficient refining company in the U.S. and internationally. The company has achieved a 10 percent improvement in energy efficiency across its global refining operations following an effort launched in 2000. ExxonMobil refining operations ranked in the first quartile for energy efficiency in every Solomon Refining Industry Survey over the past decade. Advanced efficiency technologies and techniques have helped ExxonMobil's chemical business reduce its net greenhouse gas emissions intensity by nearly 7 percent since 2013.

ExxonMobil remains committed to mitigating emissions from its operations and helping consumers reduce their emissions, including through efficient fuels, lubricants and lightweight plastics.

ExxonMobil continues to support research that leads to technology breakthroughs and participates in constructive dialogue on policy options.

About ExxonMobil

ExxonMobil, the largest publicly traded international oil and gas company, uses technology and innovation to help meet the world's growing energy needs. ExxonMobil holds an industry-leading inventory of resources, is one of the largest refiners and marketers of petroleum products, and its chemical company is one of the largest in the world. For more information, visit www.exxonmobil.com or follow us on Twitter at www.twitter.com/exxonmobil.

Cautionary Statement: Statements of future events or conditions in this release are forward-looking statements. Actual future results, including emission reductions, timing and costs and efficiency gains, could differ materially depending on political or regulatory developments; technical or operating factors; timely completion of planned projects; and other factors described under the caption "Factors Affecting Future Results" on the Investors page at exxonmobil.com.

From: Boer, Tom [JTBoer@hunton.com]

Sent: 3/9/2018 7:29:20 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: ELI

Bill, you've been "promoted" to having your e-mail quarantined by my Outlook. So apologies for the slow response. I thought the meeting was fine, although I did have to leave about 10 minutes early and it sounds like the questioning may have gotten more animated after my departure.

I hope you're doing well and we have a chance to catch up over coffee at some point.

Best, Tom



Tom Boer

Partner

jtboer@hunton.com p Ex. 6

Hunton & Williams LLP 50 California St., Suite 1700 San Francisco, CA 94111 hunton.com

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From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Wednesday, March 07, 2018 4:04 PM

To: Boer, Tom **Subject:** ELI

Hi Tom. What did you think of the ELI meeting today? I thought it was interesting.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 2/14/2018 11:00:00 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Happy Valentine's Day

This one is dedicated to my wife and best friend. Happy Valentine's Day.

Mike

https://www.wsj.com/articles/diamonds-arent-tommys-best-friend-i-am-1518564668



Michael Kerrigan

Partner

mkerrigan@hunton.com p Ex.6 bio | vCard

Hunton & Williams LLP Bank of America Plaza, St 3500 101 South Tryon St Charlotte, North Carolina 28280 www.hunton.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 2/8/2018 2:40:42 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: I Don't Care For Bike Share

I know, I know, it's hip and it's cool. But so was (is?) The Dave Matthews Band, and I never cared for them, either. Enjoy.

http://www.charlotteobserver.com/opinion/op-ed/article198851644.html



Michael Kerrigan

Partner

Hunton & Williams LLP Bank of America Plaza, St 3500 101 South Tryon St Charlotte, North Carolina 28280 www.hunton.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 6/9/2018 3:07:54 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Ode To Friendship

I was going to put *De Amicitia* in the subject line, but I could just hear another good friend, who invariably gives me wise counsel, saying "dumb it down for me, smart guy."

I hope you enjoy.

Mike

http://www.foxnews.com/opinion/2018/06/09/mike-kerrigan-thought-had-enough-friends-then-stranger-did-this-on-my-flight-home.html



Michael Kerrigan

Partner

mkerrigan@HuntonAK.com p Ex.6

bio | vCard

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

From: Field, Andrea [afield@hunton.com]

Sent: 5/16/2018 12:51:16 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Re: ACOEL Interview

Great. I will be around tomorrow afternoon from 3 pm on.

On May 15, 2018, at 8:18 PM, Wehrum, Bill <wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Hi Andy. Yes, Friday is still good. If you are available late tomorrow afternoon, maybe I can call you then?

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

On May 15, 2018, at 5:20 PM, Field, Andrea <afield@hunton.com<mailto:afield@hunton.com>> wrote:

Are we still a "go" for the interview this Friday, May 18? And if so, will you have time (no more than 10 minutes) between now and then to go over potential questions that you feel comfortable addressing? Thanks.

Andy Field

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, April 26, 2018 10:45 AM

To: Field, Andrea Subject: Tomorrow

Hi Andy. I had planned to come to your office tomorrow for the American College of Environmental Lawyers interview. But, I now will be out of town — need to travel to Memphis to take care of some family business. I still have time tomorrow, but will need to call in. Does that work for you? If so, what time is best? Also, I'd appreciate it if you could set up a call in number. Thanks.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 5/15/2018 10:59:20 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]
Subject: I Really Don't Care For Scooter Share

More truth is said in jest.

For Charlotteans, it will be in tomorrow's print if you would rather wait.

I hope you enjoy.

Mike

http://www.charlotteobserver.com/opinion/op-ed/article211159444.html



Michael Kerrigan

Partner

mkerrigan@HuntonAK.com



Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

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From: Stanko, Joseph [jstanko@hunton.com]

Sent: 3/30/2018 3:17:00 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

 $(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum,\ Wil]$

Subject: RE: Today

1 is fine



Joseph Stanko

Partner



Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

hunton.com

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, March 30, 2018 11:05 AM

To: Stanko, Joseph **Subject:** Today

Joe – Can we push to 1:00, or maybe coffee later in the day?

From: Brownell, Bill [bbrownell@hunton.com]

Sent: 3/12/2018 11:45:31 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Tomorrow

Ex. 6

----Original Message-----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Monday, March 12, 2018 7:44 AM To: Brownell, Bill

Subject: Tomorrow

Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

| From: Sent: To: Subject: | AF&PA Communications [comm@afandpa.org] 7/24/2018 2:00:51 PM Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil] Available Now: 2018 AF&PA Sustainability Report | | |
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Message







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You can update your preferences or unsubscribe from this list.

Ellis, Clare [CEllis@hunton.com] From:

11/30/2017 3:27:09 PM Sent:

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: **RE:** Congratulations

Thanks, Bill! I'll be sworn in on Tuesday - so finally feeling like an "official" Californian. Hope all is well with you, and that you will swing by and say hello if your work ever brings you to the West Coast.

Clare Ellis

Associate *Not admitted in California. Admitted only in Georgia.

cellis@hunton.com

Ex. 6

415.975.3701

Hunton & Williams LLP 50 California Street Suite 1700 San Francisco, CA 94111 hunton.com

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----Original Message----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, November 30, 2017 3:53 AM

To: Ellis, Clare

Subject: Congratulations

Clare - I heard yesterday that you passed the CA bar. Congratulations! I never had a doubt, but nice to see you get past that hurdle.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

Gill, Julia Zemnick [jgill@hunton.com] From:

Sent: 12/4/2017 11:13:42 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Fwd: Time

Attachments: Wehrum - Nov calendar.pdf; ATT00001.htm

Bill, can you open the attachment?

Julia Zemnick Gill Senior ALG Team Manager

Begin forwarded message:

From: "Gill, Julia Zemnick" <jgill@hunton.com<mailto:jgill@hunton.com>> Date: November 17, 2017 at 9:59:23 AM EST
To: "Wehrum, Bill" <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> Subject: RE: Time

Bill,

Please let me know if this works.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, November 17, 2017 8:08 AM To: Gill, Julia Zemnick Subject: Time

Ex. 6 Hi Julia. Ex. 6

```
Murdock, Eric [emurdock@hunton.com]
From:
             3/11/2018 6:53:53 PM
Sent:
To:
             Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group
             (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]
Subject:
             RE: Today
                            Ex. 6
 ----Original Message-----
From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Sunday, March 11, 2018 2:53 PM To: Murdock, Eric
Subject: Re: Today
                  Ex. 6
Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404
> On Mar 11, 2018, at 12:58 PM, Murdock, Eric <emurdock@hunton.com> wrote:
 ----Original Message--
 From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
 Sent: Sunday, March 11, 2018 12:22 PM
> To: Murdock, Eric
> Subject: Re: Today
                                            Ex. 6
 Bill Wehrum
> Assistant Administrator
  Office of Air and Radiation
> U.S. Environmental Protection Agency
  (202) 564-7404
>> On Mar 11, 2018, at 10:18 AM, Murdock, Eric <emurdock@hunton.com> wrote:
                                             Ex. 6
>> Eric
>> Eric J. Murdock
>> HUNTON & WILLIAMS LLP
>> 2200 Pennsylvania Avenue, N.W.
>> Washington, DC 20037
>> Direct Dial: (202) 955-1576
>> Cell: (703) 626-2281
>> email: emurdock@hunton.com
>>
>>> On Mar 10, 2018, at 7:09 PM, Wehrum, Bill <Wehrum.Bill@epa.gov> wrote:
>>>
Thanks.
>>>
>>>
>>> Bill Wehrum
>>> Assistant Administrator
>>> Office of Air and Radiation
>>> U.S. Environmental Protection Agency
>>> (202) 564-7404
>>>
```

>>>> Bill,

>>>> On Mar 10, 2018, at 10:21 AM, Murdock, Eric <emurdock@hunton.com> wrote:

Ex. 6 >>>> Regards, >>>> Eric >>>> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] >>>> Sent: Saturday, March 10, 2018 10:19 AM >>>> To: Murdock, Eric >>>> Subject: Today >>>> Ex. 6

>>>> ______
>>>> Bill Wehrum
>>>> Assistant Administrator
>>>> Office of Air and Radiation
>>>> U.S. Environmental Protection Agency
>>>> (202) 564-7404

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 12/22/2017 12:39:17 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: An Adolescent Christmas

New platform for one final for 2017. The old man has provided enough fodder in the memories department for one year.

Dad, hit the showers. Mom, grab your helmet, and get in the game!

Thank you all for reading in 2017. Here's to a great 2018 for us, one and all!

Mike

http://www.foxnews.com/opinion/2017/12/22/christmas-memory-craziest-gift-ever.html

From: Stanko, Joseph [jstanko@hunton.com]

Sent: 1/2/2018 7:30:31 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Happy New Year

Ex. 6



Joseph Stanko

Partner

jstanko@hunton.com P[Ex. 6 bio VCard

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

hunton.com

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Tuesday, January 02, 2018 1:59 PM

To: Stanko, Joseph

Subject: RE: Happy New Year

Ex. 6

From: Stanko, Joseph [mailto:jstanko@hunton.com]

Sent: Tuesday, January 2, 2018 1:51 PM **To:** Wehrum, Bill Wehrum, Bill@epa.gov>

Subject: RE: Happy New Year

Bill:

Ex. 6

Joe



Joseph Stanko

Partner

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 hunton com

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Tuesday, January 02, 2018 1:46 PM To: Stanko, Joseph

Subject: Happy New Year

Ex. 6

From: Knauss, Chuck [CKnauss@hunton.com]

Sent: 2/25/2018 11:10:03 PM

> U.S. Environmental Protection Agency

> (202) 564-7404

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Catch Up

Perfect.

----Original Message----From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] Sent: Sunday, February 25, 2018 6:08 PM To: Knauss, Chuck Subject: Re: Catch Up Coffee at Starbucks at the JW Marriott on Penn? A few minutes after 10? Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404 > On Feb 25, 2018, at 6:04 PM, Knauss, Chuck <CKnauss@hunton.com> wrote: > Yes. Call? Or I am ending a meeting in the vicinity and could swing by. Let me know. > ----Original Message---> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] > Sent: Sunday, February 25, 2018 5:18 PM > To: Knauss, Chuck > Subject: Catch Up > Do you have a few minutes at 10 tomorrow? > Bill Wehrum > Assistant Administrator > Office of Air and Radiation

From: DeLaquil, Mark [mdelaquil@bakerlaw.com]

Sent: 2/27/2018 3:15:26 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Steinwurtzel, Robert N. [rsteinwurtzel@bakerlaw.com]

Subject: NESHAP Reconsideration Matter

Dear Bill,

I hope that you are settling in well to your new job.

Rob Steinwurtzel and I represent the Association of Battery Recyclers (ABR), whose members recycle spent lead batteries in a safe and environmentally responsible manner. We are hoping to meet with you concerning the secondary lead smelting NESHAP reconsideration proceeding (40 CFR Part 63 Subpart X), which has been ongoing for many years.

Please let us know if it would be possible to set a meeting for the week of March 26. If that week does not work, please let me know your alternative availability.

Best regards,

Mark

Mark DeLaquil

Partner

BakerHostetler

Washington Square 1050 Connecticut Ave, N.W. | Suite 1100 Washington, DC 20036-5304

T+ Ex. 6

mdelaquil@bakerlaw.com bakerlaw.com





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Any tax advice in this email is for information purposes only. The content of this email is limited to the matters specifically addressed herein and may not contain a full description of all relevant facts or a complete analysis of all relevant issues or authorities.

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Delivery Report

From: Microsoft Outlook [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=MICROSOFTEXCHANGE329E71EC88AE4615BBC36AB6CE41109EF7088051]

Sent: 11/30/2017 3:32:35 AM
To: cknauss@hinton.com
Subject: Undeliverable: Lunch

Attachments: Lunch

Your message

To: mjaber@hunton.com; afield@hunton.com; hnickel@hunton.com; cknauss@hinton.com

Subject: Lunch

Sent: 11/28/2017 3:32:12 AM

Delivery has failed to these recipients or groups:

cknauss@hinton.com (cknauss@hinton.com)

Your message wasn't delivered. Despite repeated attempts to deliver your message, the recipient's email system refused to accept a connection from your email system.

Contact the recipient by some other means (by phone, for example) and ask them to tell their email admin that it appears that their email system is refusing connections from your email server. Give them the error details shown below. It's likely that the recipient's email admin is the only one who can fix this problem.

For Email Admins

No connection could be made because the target computer actively refused it. This usually results from trying to connect to a service that is inactive on the remote host - that is, one with no server application running. For more information and tips to fix this issue see this article: https://go.microsoft.com/fwlink/?LinkId=389361

Diagnostic information for administrators:

Generating server: CY4PR09MB2277.namprd09.prod.outlook.com Receiving server: CY4PR09MB2277.namprd09.prod.outlook.com

cknauss@hinton.com

11/30/2017 3:32:35 AM - Server at CY4PR09MB2277.namprd09.prod.outlook.com returned '550 5.4.316 Message expired, connection refused(Socket error code 10061)'

11/30/2017 3:22:16 AM - Server at hinton.com (69.172.201.153) returned '450 4.4.316 Connection refused [Message=Socket error code 10061] [LastAttemptedServerName=hinton.com] [LastAttemptedIP=69.172.201.153:25] [CY1GCC01FT006.eop-gcc01.prod.protection.outlook.com](Socket error code 10061)'

Original message headers:

```
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=usepa.onmicrosoft.com;
 s=selector1-epa-gov;
 h=From:Date:Subject:Message-ID:Content-Type:MIME-Version;
 bh=15H+GoAOwpDBGd5HiQGGTvQN4e4ioEVV5I2+KBAtZRc=;
b=mmQ77izg1kkWT4MwiUrjnYciGy+JeSkUHaF1M16DnymPZxhQvUf6es+SoaEr3h103HW7CKE0pgQcozbnjEx/SVR
Lh8fgvydtikkkzlJSOUKh3ITats+NUElbt7KxOyZF9j43VkwuvCjv9riHROq01LQ1ZHB7uIgXulSOmqZBIM4=
Received: from CY4PR09MB2277.namprd09.prod.outlook.com (10.172.140.11) by
 CY4PR09MB2277.namprd09.prod.outlook.com (10.172.140.11) with Microsoft SMTP
 Server (version=TLS1 2, cipher=TLS ECDHE RSA WITH AES 256 CBC SHA384 P256) id
 15.20.260.4; Tue, 28 Nov 2017 03:32:13 +0000
Received: from CY4PR09MB2277.namprd09.prod.outlook.com ([10.172.140.11]) by
 CY4PR09MB2277.namprd09.prod.outlook.com ([10.172.140.11]) with mapi id
 15.20.0260.006; Tue, 28 Nov 2017 03:32:12 +0000
From: "Wehrum, Bill" <Wehrum.Bill@epa.gov>
To: "mjaber@hunton.com" <mjaber@hunton.com>, "afield@hunton.com"
        <afield@hunton.com>, "hnickel@hunton.com" <hnickel@hunton.com>,
        "cknauss@hinton.com" <cknauss@hinton.com>
Subject: Lunch
Thread-Topic: Lunch
Thread-Index: AQHTZ/16mIOAHUZOZEueJmTciAhAWg==
Date: Tue, 28 Nov 2017 03:32:12 +0000
Message-ID: <FAB81425-D747-42B6-9739-863758704DDC@epa.gov>
Accept-Language: en-US
Content-Language: en-US
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
authentication-results: spf=none (sender IP is )
 smtp.mailfrom=Wehrum.Bill@epa.gov;
x-originating-ip: [2600:1003:b02c:leea:fceb:23da:d33c:f52d]
x-ms-publictraffictype: Email
x-microsoft-exchange-diagnostics:
1;CY4PR09MB2277;6:nqLPhDY1grPftNk2SH0a4wWlI+E2+13Qge5AHAUcvDzABlUi1Yk+kQ2PsGB23IkZEBeCaOg
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B+Yv0sHqtdV7Cn3A4GKJHXk/cU2Ul/nImcGyHbBmGA3w9SnQUUTon+FXt7v+h8a15qFYWPai4TVK07NnhEatFxHTu
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8dbqT3NZ2xYwFHIcwG6bZY3Zw=;5:tWeoI5yaJX0iIi3t/5ePciuNDwb+/7T8kFT3RMbB49V0CoKohSolSyiwfzbU
t7+1TTpkE9PQAWhf9rc65VXh3sf2ZEkjGB/nYRsS1/IH2ePSzCOsfYM7FicUURYSPpj22POS/7EPsyGmLmahXIXrN
1HzSshG6JNPzmhA/ntYRXg=;24:uFN0nNL3+01R71ZOtSN5Kmzn+2KFjJQ283k00x8BWfd501XR3cJPGR2Ows01DY
bdlBr8Nrtz3y1rZ0GmPIGbxH5Ef8ilCumpdTeZszZJXyA=;7:SlDz+xs+xN5l7Q7ToM6k4P0r9LRmCnLH35ECrWJq
eKZTT3KSJ/gEl03uilyvQWYs3rWTvQ/VccBzppSNxIWocg4oGW/RwG05c6ppiOvyZPWdUEB+FsZUCXi9GOgBKOugc
Cui83Nc49PqE8zhY7p9tztW9yvKzKdJfNwzEjEp7BrmjAND2Zn4UAQYzKd0YTcv56FoAvCAswyGuQD8OcGfi0WVFG
WWhPYvDFt0juzMa163FVQfN/fWwouCsmFm05pm
x-ms-exchange-antispam-srfa-diagnostics: SSOS;
x-ms-office365-filtering-correlation-id: 742a5855-c54c-4394-6alb-08d536109d58
x-microsoft-antispam:
Uriscan: ;BCL: 0; PCL: 0; RULEID: (4534020) (4602075) (4627115) (201703031133081) (201702281549075)
(5600026) (4604075) (2017052603258); SRVR: CY4PR09MB2277;
X-MS-TrafficTypeDiagnostic: CY4PR09MB2277: | CY4PR09MB2277:
z-microsoft-antispam-prvs:
<CY4PR09MB2277A524FE0006D5DED81AF9EB3A0@CY4PR09MB2277.namprd09.prod.outlook.com>
x-exchange-antispam-report-test: UriScan:;
x-ezchange-antispam-report-cfa-test:
BCL: 0; PCL: 0; PULEID: (6040450) (2401047) (8121501046) (5005006) (3231022) (93006095) (93001095) (1
0201501046) (3002001) (6041248) (20161123555025) (20161123560025) (20161123558100) (20170313142
3075) (201702281528075) (201703061421075) (201703061406153) (20161123562025) (20161123564025) (
6072148)(201708071742011); SRVR: CY4PR09MB2277; BCL: 0; PCL: 0; PULEID: (100000803101)(1001104000
95); SRVP: CY4PP09MB2277;
x-forefront-prvs: 0505147DDB
x-forefront-antispam-report:
SFV:NSPM;SFS: (10019020) (6009001) (346002) (376002) (366004) (189002) (199003) (33656002) (221733
```

```
001) (50986999) (102836003) (14454004) (110136005) (6116002) (7116003) (68736007) (5660300001) (89
36002) (8676002) (7736002) (54356999) (305945005) (97736004) (81166006) (83716003) (81156014) (101
416001) (2900100001) (2906002) (2201001) (99286004) (3280700002) (478600001) (2501003) (6512007) (
6436002) (53936002) (558084003) (86362001) (189998001) (3660700001) (36756003) (106356001) (10558
6002) (82746002) (77096006) (3480700004) (72206003) (316002) (6506006) (6486002) (25786009); DIR:O
UT; SFP: 1102; SCL: 1; SRVR: CY4PR09MB2277; H: CY4PR09MB2277.namprd09.prod.outlock.com; FPR:; SPF: N
one; PTR: InfoNoRecords; MX: 1; A: 1; LANG: en;
received-spf: None (protection.outlook.com: epa.gov does not designate
permitted sender hosts)
spamdiagnosticoutput: 1:99
spamdiagnosticmetadata: NSPM
Content-Type: text/plain; charset="us-ascii"
Content-ID: <DCD5DB23F23F2D42AB97EC3369121177@usepa.onmicrosoft.com>
Content-Transfer-Encoding: quoted-printable
MIME-Version: 1.0
X-MS-Exchange-CrossTenant-Network-Message-Id: 742a5855-c54c-4394-6alb-08d536109d58
X-MS-Exchange-CrossTenant-originalarrivaltime: 28 Nov 2017 03:32:12.8893
 (UTC)
X-MS-Exchange-CrossTenant-fromentityheader: Hosted
X-MS-Exchange-CrossTenant-id: 88b378b3-6748-4867-acf9-76aacbeca6a7
K-MS-Exchange-Transport-CrossTenantHeadersStamped: CY4PR09MB2277
X-Microsoft-Exchange-Diagnostics:
1;CY4PR09MB2277;23:2fc4ODS1689ZWi7k3SJpcMkatHDk+86P39ZUoz5QhIw8WIyP1dS7niTnaxSVaagmo4pLTn
PNuKvMcoP0lDN7iTuhVb3dwnpUiYp57EiL9oal+qD50NIGfgUjhyV2lox0+iIE43y5wb6HdOcNHqbeuA==
X-OriginatorOrg: epa.gov
```

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 11/30/2017 2:23:24 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Re: Lunch today

Ex. 6

Julia Zemnick Gill Senior ALG Team Manager

On Nov 29, 2017, at 8:30 PM, Wehrum, Bill <wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Nov 29, 2017, at 1:11 PM, Gill, Julia Zemnick <jgill@hunton.com<mailto:jgill@hunton.com>> wrote:

Ex. 6

Julia Zemnick Gill Senior ALG Team Manager

On Nov 29, 2017, at 1:05 PM, Wehrum, Bill <a href="https://www.bill@epa.gov/mailto:wehrum.Bill@epa.gov

Ex. 6

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

On Nov 29, 2017, at 8:01 AM, Gill, Julia Zemnick <jgill@hunton.com<mailto:jgill@hunton.com><mailto:jgill@hunton.com>> wrote:

Ex. 6

Julia Zemnick Gill Senior ALG Team Manager

On Nov 29, 2017, at 7:24 AM, Wehrum, Bill

<Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>>
wrote:

Ex. 6

----Original Message----

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Wednesday, November 29, 2017 5:23 AM

To: Wehrum, Bill

<wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>>
Subject: Lunch today

Hi Bill,

Ex. 6

Thanks!

Julia Zemnick Gill Senior ALG Team Manager

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 11/14/2017 11:54:42 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Request

Attachments: Wehrum - Pending Cases [Oct 12, 2017]_66956433_1-c.docx

Sensitivity: Company Confidential

Bill,

Attached is your case list. Below are your clients for whom you recorded any time over the past 24 months organized in alpha order. This hopefully will help with any conflicts/disclosure issues related to the environmental cases your represented while at Hunton. Please let me know if there's any other information you need.

CONFIDENTIAL - Wehrum, Bill - Clients with Hours Worked - 24 Months (11/2017)

AGRIUM INC AND AGRIUM U.S. INC & NU-WEST

AMERICAN FOREST & PAPER ASSOCIATION

AMERICAN FUEL & PETROCHEMICAL MANUFACTUR

AMERICAN PETROLEUM INSTITUTE

B10 LITIGATION COALITION - AMERICAN PETR

BRICK INDUSTRY ASSOCIATION

CEMEX USA, INC.

CHAMPION POWER EQUIPMENT, INC.

CHEMICAL SAFETY ADVOCACY GROUP (CSAG)

CHEVRON CORPORATION

DIAGEO

DOMINION RESOURCES SERVICES, INC.

DUKE ENERGY CORPORATION

ENBRIDGE INC.

EVONIK CORPORATION

EXXONMOBIL CORPORATION

FLINT HILLS RESOURCES, LP

GAS PROCESSORS ASSOCIATION

GENERAL ELECTRIC COMPANY

GEORGIA PACIFIC LLC

KINDER MORGAN, INC.

KOCH COMPANIES PUBLIC SECTOR, LLC

KOCH INDUSTRIES, INC.

LEHIGH HANSON, INC.

LOWE'S COMPANIES, INC.

NATIONAL STONE, SAND & GRAVEL ASSOCIATIO

CBI / Ex. 4

NONBILLABLE CLIENTS

PFIZER, INC.

PHILLIPS 66

PORTLAND CEMENT ASSOCIATION

PRINOTH LTD.

SALT RIVER PROJECT

CBI / Ex. 4

SUNFLOWER ELECTRIC POWER CORP.
TILE COUNCIL OF NORTH AMERICA, INC.
UTILITY AIR REGULATORY GROUP (UARG)
UTILITY WATER ACT GROUP
WHITACRE GREER COMPANY

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] **Sent:** Tuesday, November 14, 2017 6:43 PM

To: Gill, Julia Zemnick Subject: RE: Request

Thanks Julia. Please delete the professional summary. Sounds like I'm still promoting myself in private practice, which I should not do.

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Tuesday, November 14, 2017 5:31 PM **To:** Wehrum, Bill < <u>Wehrum, Bill@epa.gov</u>>

Subject: RE: Request

Hi Bill,

Happy to see you are up and running on a real email address. I will send that info to you tomorrow, if that's okay. I am traveling back from Richmond tonight.

Do you want your professional summary deleted or do you want to keep it on your profile?

Bill Wehrum • 1st

Assistant Administrator, Office of Air and Radiation at US Environmental Protection Agency (EPA)

US Environmental Protection Agency (EPA) • Widener University School of Law
Washington, District Of Columbia • 406 🔉



Bill was the head of the Administrative Law Group and co-chair of the Environmental Team. Bill's practice focuses on air quality issues, including regulatory development and related litigation; compliance counseling and...

See more ~

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Tuesday, November 14, 2017 5:23 PM

To: Gill, Julia Zemnick **Subject:** Request

Hi Julia. Can you send me a list of all clients to whom I billed time for the past 24 months? Also, I need a list of the cases in which I made an appearance. Karen put together a table for me that I submitted with to EPW. Can you get a copy from her and send it along as well?

Thanks for your help.

2 down, 548 to go.

Wehrum – Pending Cases October 12, 2017

| Case Number Title | Party Attorney | Originating Case Number Origin |
|--|---|---|
| 08-1277 American Petroleum Institute v. EPA | American Fuels & Petrochemical Manufacturers Association; American Petroleum Institute; National Petrochemical & Refiners Association; Western States Petroleum Association | EPA-1 : EPA-73FR35838 Environmental Protection Agency |
| 08-1281 Env. Integrity Project v. EPA | American Fuels & Petrochemical Manufacturers Association; American Petroleum Institute; National Petrochemical & Refiners Association | EPA-1 : EPA-73FR35838 Environmental Protection Agency |
| 09-1332 Kinder Morgan CO2 Co., LP v. EPA | Kinder Morgan CO2 Co., LP | EPA-1 : EPA-74FR56260 Environmental Protection Agency |
| 11-1023 Gas Processors Association v. EPA | Gas Processors Association | EPA-1 : EPA-75FR74458 Environmental Protection Agency |
| 11-1309 American Petroleum Institute, et al v. EPA | American Petroleum Institute; Independent Petroleum Association of America | EPA-1 : EPA-76FR38748 Environmental Protection Agency |
| 12-1208 National Rural Electric Coop. v. EPA | National Rural Electric Cooperative Association | EPA-1 : EPA-77FR10324 Environmental Protection Agency |
| 12-1352 National Rural Electric Cooper v. EPA | National Rural Electric Cooperative Association | EPA-1 : EPA-77FR34830 Environmental Protection Agency |
| 12-1405 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-77FR49490 Environmental Protection Agency |
| 12-1406 Gas Processors Association v. EPA | American Petroleum Institute | EPA-1 : EPA-77FR49490 Environmental Protection Agency |
| 12-1442 American Petroleum Institute, et al v. EPA | 11/13/2012 Open American Fuel & Petrochemical Manufacturers; American Petroleum Institute | EPA-1 : EPA-77FR56422 Environmental Protection Agency |
| 13-1063 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-78FR2210 Environmental Protection Agency |

| 13-1108 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-77FR49490 Environmental Protection Agency |
|---|---|--|
| 13-1233 Conservation Law Foundation, et al.v. EPA | National Rural Electric Cooperative Association | EPA-1 : EPA-78FR6674 Environmental Protection Agency |
| <u>13-1256</u> Sierra Club, et al v. EPA | American Coke and Coal Chemicals Institute; American Forest & Paper Association; American Iron and Steel Institute; American Wood Council; Biomass Power Association; Chamber of Commerce of the United States of America; Corn Refiners Association; National Association of Manufacturers; National Oilseed Processors; Rubber Manufacturers Association; Southeastern Lumber Manufacturers Association | EPA-1 : EPA-76FR15608 Environmental Protection Agency |
| 13-1289 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-78FR58416 Environmental Protection Agency |
| 14-1199 PSEG Power LLC, et al v. EPA | National Rural Electric Cooperative Association | EPA-1 : EPA-79FR48072 Environmental Protection Agency |
| 14-1267 Georgia-Pacific LLC v. EPA | Georgia-Pacific LLC | EPA-1 : EPA-79FR60898 Environmental Protection Agency |
| 15-1021 Gas Processors Association v. EPA | Gas Processors Association | EPA-1 : EPA-79FR70352 Environmental Protection Agency |
| 15-1044 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-79FR79018 Environmental Protection Agency |
| 15-1197 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-80FR25068 Environmental Protection Agency |
| 15-1473 Gas Processors Association v. EPA | Gas Processors Association | EPA-1 : EPA-80FR64262 Environmental Protection Agency |
| 15-1487 Sierra Club, et al v. EPA, et al | Brick Industry Association | EPA-1 : EPA-80FR65470 Environmental Protection Agency |

-[PAGE * MERGEFORMAT]-

| 15-1492 Brick Industry Association v. EPA | Brick Industry Association | EPA-1 : EPA-80FR65470 Environmental Protection Agency |
|---|--|--|
| 16-1021 Sierra Club, et al v. EPA, et al | American Chemistry Council; American Coke and Coal Chemicals Institute; American Forest & Paper Association; American Iron and Steel Institute; American Wood Council; Biomass Power Association; Coalition for Responsible Waste Incineration; Council of Industrial Boiler Owners; National Association of Manufacturers; National Oilseed Processors Association; Southeastern Lumber Manufacturers Association, Inc. | EPA-1 : EPA-80FR72790 Environmental Protection Agency |
| 16-1033 American Fuel & Petrochemical, et al.v. EPA | American Fuel & Petrochemical Manufacturers; American Petroleum Institute | EPA-1 : EPA-80FR75178 Environmental Protection Agency |
| 16-1035 Air Alliance Houston, et al v. EPA, et al | American Fuel & Petrochemical Manufacturers; American Petroleum Institute | EPA-1 : EPA-80FR75178 Environmental Protection Agency |
| 16-1179 Brick Industry Association v. EPA | Brick Industry Association | EPA-1 : EPA-81FR31234 Environmental Protection Agency |
| <u>16-1270</u> American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-81FR35824 Environmental Protection Agency |
| 16-1271 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-81FR35944 Environmental Protection Agency |
| 16-1345 American Petroleum Institute v. EPA | American Petroleum Institute | EPA-1 : EPA-81FR51102 Environmental Protection Agency |
| 16-1425 Natural Resources Defense Coun v EPA | American Petroleum Institute | EPA-1 : EPA-77FR49490 Environmental Protection Agency |
| 17-1088 Utility Air Regulatory Group v. EPA | Utility Air Regulatory Group | EPA-1 : EPA-82FR4594 Environmental Protection Agency |

-[PAGE * MERGEFORMAT]-

From: Field, Andrea [afield@hunton.com]

Sent: 11/28/2017 11:36:09 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Re: Lunch

Thank you, Bill. I appreciate that more than you can know.

On Nov 28, 2017, at 6:33 AM, Wehrum, Bill <wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Nov 27, 2017, at 11:56 PM, Field, Andrea <afield@hunton.com<mailto:afield@hunton.com>> wrote:

Bill -

Ex. 6

Andy

On Nov 27, 2017, at 10:32 PM, Wehrum, Bill

Wehrum.Bill@epa.gov

mailto:Wehrum.Bill@epa.gov>> wrote:

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 2/25/2018 12:20:04 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Amazon HQ2 Search: Reflections of a Silver Medalist

So Charlotte lost out on Amazon HQ2, no big deal. It's not like Price's Chicken Coop closed its doors or something. We'll survive this.

If anyone's looking for me I'll be at the HT, in my house pants and slippers. Enjoy.

http://www.charlotteobserver.com/opinion/op-ed/article201877034.html

From: Landin, David [dlandin@hunton.com]

Sent: 2/6/2018 6:56:17 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: TSCA, etc.

Good afternoon.

Trying to catch up with schedule for when scoping document might be expected and to schedule an informal introduction to Duersin or Beck?

Thanks,

David.

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 1/29/2018 12:52:20 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Ode To Dogs

Here's to our dogs, even the bad ones. Especially the bad ones. Enjoy.

http://dailycaller.com/2018/01/28/things-our-dogs-would-say-if-they-could-speak-and-were-incredibly-sarcastic/



Michael Kerrigan

Partner

mkerrigan@hunton.com p Personal bio VCard

Hunton & Williams LLP Bank of America Plaza, St 3500 101 South Tryon St Charlotte, North Carolina 28280 www.hunton.com

This communication is confidential and is intended to be privileged pursuant to applicable law. If the reader of this message is not the intended recipient, please advise by return email immediately and then delete this message and all copies and backups thereof.

From: Nickel, Henry [hnickel@hunton.com]

Sent: 11/28/2017 4:54:00 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Jaber, Makram [mjaber@hunton.com]; Field, Andrea [afield@hunton.com]; cknauss@hinton.com

Subject: Re: Lunch

Sounds great!

Sent from my iPad

On Nov 27, 2017, at 10:32 PM, Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 12/4/2017 11:56:40 AM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: The Use Of Fatherly Force

Fun childhood memories of the Big Guy, and yes, we're best friends now. Enjoy.

Mike

https://www.wsj.com/articles/the-use-of-fatherly-force-1512338175



Michael Kerrigan

Partner

mkerrinan@hunton.com p Ex. 6 bio | vCard

Hunton & Williams LLP Bank of America Plaza, St 3500 101 South Tryon St Charlotte, North Carolina 28280 www.hunton.com

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From: Barnes, Felicia [FBarnes@hunton.com]

Sent: 11/18/2017 2:26:39 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Litigation

```
Welcome!
```

```
----Original Message----
From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Friday, November 17, 2017 8:33 PM
To: Barnes, Felicia
Subject: Re: Litigation
Thanks. Perfect.
Sent from my iPhone
> On Nov 17, 2017, at 8:30 PM, Barnes, Felicia <FBarnes@hunton.com> wrote:
> Attached - lmk if anything is unclear
> ----Original Message----
> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
> Sent: Friday, November 17, 2017 7:55 PM
> To: Barnes, Felicia
> Subject: Re: Litigation
> Just the rules. Thanks much.
> Sent from my iPhone
>> On Nov 17, 2017, at 7:54 PM, Barnes, Felicia <FBarnes@hunton.com> wrote:
>> Yes, I can do that. Do you want the client identity and posture (petitioner v. intervenor) too? Or
just the rules?
>>
>> ----Original Message----
>> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
>> Sent: Friday, November 17, 2017 7:28 PM
>> To: Barnes, Felicia
>> Subject: Litigation
>>
>> Felicia - You mentioned the other night that you were helping file withdrawal notices for my cases.
Would you please send me a list of the rules that we were challenging in each case? If you didn't figure
that out in putting together the withdrawal notices, could you maybe ask Paula to put together a list?
>>
>> Thanks for your help.
>>
>> Sent from my iPhone
> <Rules at Issue in Prior WLW D.C. Circuit Cases-c.xlsx>
```

From: Broome, Shannon S. [SBroome@hunton.com]

Sent: 12/18/2017 8:06:50 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Speaker request

Bill,

I am reaching out on behalf of the Rocky Mountain Mineral Law Foundation, which is having its annual air quality conference in Denver on February 6-7, 2018 to invite you or one of your colleagues to speak on the EPA's plans for air regulation in the new administration. Here is a link to the conference website. The conference organizers tell us that the ideal time for you or your designee to speak would be on the morning of the 6th or the morning of the 7th as the keynote speaker, with a slight preference for the 6th. Could you please forward this request to the appropriate folks at EPA and I will be happy to work with them to arrange what makes sense if one of you are able to assist.

https://www.rmmlf.org/conferences/air4-air-quality-issues-affecting-oil-gas-and-mining-development-and-operations/overview

Best regards,



Shannon S. Broome

Partner

sbroome@hunton.com

(SF) Ex. 6 (DC) (cell)

Hunton & Williams LLP 50 California Street Suite 1700 San Francisco, CA 94111 hunton.com

Check out Hunton's new Environmental and Energy Law Blog! https://www.huntonnickelreportblog.com/

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From: Barnes, Felicia [FBarnes@hunton.com]

Sent: 11/18/2017 1:29:09 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Litigation

Attachments: Rules at Issue in Prior WLW D.C. Circuit Cases-c.xlsx

```
Attached - lmk if anything is unclear
----Original Message----
From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Friday, November 17, 2017 7:55 PM
To: Barnes, Felicia
Subject: Re: Litigation
Just the rules. Thanks much.
Sent from my iPhone
> On Nov 17, 2017, at 7:54 PM, Barnes, Felicia <FBarnes@hunton.com> wrote:
> Yes, I can do that. Do you want the client identity and posture (petitioner v. intervenor) too? Or just
the rules?
> ----Original Message----
> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
> Sent: Friday, November 17, 2017 7:28 PM
> To: Barnes, Felicia
> Subject: Litigation
> Felicia - You mentioned the other night that you were helping file withdrawal notices for my cases.
Would you please send me a list of the rules that we were challenging in each case? If you didn't figure
that out in putting together the withdrawal notices, could you maybe ask Paula to put together a list?
> Thanks for your help.
> Sent from my iPhone
```

| Opening Date | |
|--------------------|---|
| Status | Rule Being Litigated |
| 08/21/2008 | "Standards of Performance for Petroleum |
| Open | Refinieries," 73 FR 35838 (June 24, 2008) |
| 08/25/2008 | (Refinery NSPS, Part J, Ja) Same as above |
| į. | Same as above |
| Орен | |
| 12/29/2009 | "Mandatory Reporting of Greenhouse Gases," |
| Open | 74 FR 56260 (October 30, 2009) |
| 0.1.10.0.10.11 | |
| 3 | "Mandatory Reporting of Greenhouse Gases: Petroleum and Natural Gas Systems," 75 FR |
| Ореп | 74458 (November 30, 2010) |
| | 74400 (November 30, 2010) |
| 08/30/2011 | "Review of New Sources and ModificationIs in |
| Open | Indian Country; Final Rule," 76 FR 38748 (July |
| | 1, 2011) |
| | "Revisions to Federal Implementation Plans To |
| Open | Reduce Interstate Transport of Fine Particular Matter and Ozone," 77 FR 10324 (February 21, |
| | 2012) (Final CSPAR Revisions) |
| 08/13/2012 | "Revisions to Federal Implementation Plans To |
| Open | Reduce Interstate Transport of Fine Particular |
| | Matter and Ozone," 77 FR 34830 (June 12, |
| 10/15/2012 | Oil and Gas NESHAP (severed from Quad O |
| Open | cases), 77 FR 49490 (August 16, 2012) |
| 10/15/2012 | O&G NSPS and NESHAP, 77 FR 49490 |
| | (August 16, 2012) |
| Орен | (Adgust 10, 2012) |
| 11/13/2012 | "Standards of Performance for Petroleum |
| Open | Refinieries; Standards of Performance for |
| | Petroleum Refinieries for Which Construction, |
| | Reconstruction, or Modification Commenced |
| | After May 14, 2007," 77 FR 56422 (September |
| 03/11/2013 | 12. 2012) (NSPS Ja) "Review of New Sources and Modifications in |
| 1 | Indian Country: Notice of Action Partially |
| | Granting Petition for Reconsideration and |
| | Denying Request for Administrative Stay," 78 FR |
| | 2210 (January 10, 2013) (Revised Tribal Minor |
| 1 | EPA's Quad O Rule, 77 FR 49490 (August 16, |
| Open | 2012) (severed from O&G NESHAP, No. 12- |
| | 1405); Quad O Recon Rules and Quad Oa challenges are all consolidated here |
| 08/02/2013 | EPA's RICE MACT Rule, 78 FR 6674 (January |
| 1 | 30, 2013) |
| | |
| 10/16/2013 | Boiler MACT, 76 FR 15608 (March 21, 2011) |
| Open | |
| 11/22/2013 | 2013 Quad O Rule, 78 FR 58416 (September |
| 3 | 23, 2013) |
| Topon | 20, 2010) |
| 10/14/2014 | RICE MACT, 79 FR 48072 (August 15, 2014) |
| Open | · - |
| 140/05/2021 | B |
| 12/05/2014 | Resin MACT, 79 FR 60898 (October 8, 2014) |
| Open | |
| į. | |
| | Greenhouse Gas Reporting Rule: 2014 |
| 01/23/2015 | Greenhouse Gas Reporting Rule: 2014 Revisions and Confidentiality Determinations for |
| 01/23/2015 Open | |
| Open | Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems, 79 FR 70352 (November 25, 2014) |
| į. | Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems, 79 FR |
| | Open 08/25/2008 Open 12/29/2009 Open 01/28/2011 Open 08/30/2011 Open 04/23/2012 Open 10/15/2012 Open 10/15/2012 Open 10/15/2012 Open 3/11/2013 Open 08/02/2013 Open 10/16/2013 Open 10/16/2013 Open 11/122/2013 Open 10/14/2014 |

| 15-1197 | 06/30/2015 | Tribal BIN Rule, 80 FR 25068 (May 1, 2015) |
|--|------------|--|
| American Petroleum Institute v. EPA | Open | |
| | | |
| <u>15-1473</u> | 12/21/2015 | "Greenhouse Gas Reporting Rule: 2015 |
| Gas Processors Association v. EPA | Open | Revisions and Confidentiality Determinations for |
| | | Petroleum and Natural Gas Systems," 80 FR |
| 15.4 (05. | 10/00/00/ | 64262 (October 22, 2015) |
| <u>15-1487</u> | 12/22/2015 | Brick MACT Rule, 80 FR 65470 (Oct. 26, 2015) |
| Sierra Club, et al v. EPA, et al | Open | |
| 15-1492 | 12/23/2015 | Brick MACT Rule, 80 FR 65470 (Oct. 26, 2015) |
| Brick Industry Association v. EPA | Open | |
| | | |
| <u>16-1021</u> | 01/19/2016 | Boiler MACT Recon Rule, 80 FR 72790 |
| Sierra Club, et al v. EPA, et al | Open | (November 20, 2015) |
| | | |
| <u>16-1033</u> | 01/29/2016 | Refinery Sector Rule, 80 FR 75178 (December |
| American Fuel & Petrochemical, et al v. EPA | Open | 1, 2015) |
| 16-1035 | 02/01/2016 | Refinery Sector Rule, 80 FR 75178 (December |
| Air Alliance Houston, et al v. EPA, et al | Open | 1. 2015) |
| ZW. PARENTON STOMOROGIA, NA GR. E. SEL FIL NA GR | Орен | 1, 2010) |
| 16-1105 | 04/01/2016 | OSHA's Silica Rule, 81 FR 16286 (, 2016) |
| North America's Building Trade v. OSHA, et al. | Open | · · · · · · · · · · · · · · · · · · · |
| 16-1131 | 04/28/2016 | OSHA's Silica Rule, 81 FR 16286 (, 2016) |
| Georgia Construction Aggregate, et al | Open | · · · · · · · · · · · · · · · · · · · |
| v. Secretary of Labor, et al | | |
| 16-1146 | 05/13/2016 | OSHA's Silica Rule, 81 FR 16286 (, 2016) |
| Brick Industry Association v. DOL, et al | Open | |
| <u>16-1179</u> | 06/09/2016 | Denial of BIA's Recon Petition, 81 FR 31234 |
| Brick Industry Association v. EPA | Open | |
| 16-1270 | 08/02/2016 | Quad Oa Rule, 81 FR 35824 (June 3, 2016) |
| American Petroleum Institute v. EPA | Open | , |
| | | |
| 16-1271 | 08/02/2016 | Tribal FIP for O&G, 81 FR 35944 (June 3, 2016) |
| American Petroleum Institute v. EPA | Open | |
| | | |
| 16-1345 [consolidated with lead case No. 16- | 10/03/2016 | Revised Regional Consistency Regulations, 81 |
| <u>1344</u>] | Open | FR 51102 (Aug. 3, 2016) |
| American Petroleum Institute v. EPA | | |
| <u>16-1425</u> | 12/30/2016 | Quad O Rule, 77 FR 49490 (August 16, 2012) |
| Natural Resources Defense Coun v. EPA | Open | (the Court spun off ENGO issues regarding |
| | | whether EPA was required to regulate methane |
| 17-1088 [consolidated with lead case No. 17- | 03/14/2017 | Amendments to RMP, 82 FR 4594 (January 13, |
| 1087] | Open | 2017) |
| Utility Air Regulatory Group v. EPA | | |

| Originating Case Number |
|---|
| Origin |
| EPA-1 : EPA-73FR35838 Environmental Protection |
| Agency |
| EPA-1 : EPA-73FR35838 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-74FR56260 |
| Environmental Protection |
| Agency EPA-1: EPA-75FR74458 |
| Environmental Protection |
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| EPA-1 : EPA-76FR38748 |
| Environmental Protection |
| Agency EPA-1: EPA-77FR10324 |
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| Environmental Protection Agency |
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| EPA-1 : EPA-77FR34830 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-77FR49490 |
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| Environmental Protection |
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| EPA-1 : EPA-77FR56422 |
| Environmental Protection |
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| EPA-1 : EPA-78FR2210 |
| Environmental Protection |
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| EPA-1 : EPA-77FR49490 |
| Environmental Protection |
| Agency |
| |
| EPA-1 : EPA-78FR6674 |
| Environmental Protection |
| Agency EPA-1 : EPA-76FR15608 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-78FR58416 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-79FR48072 |
| Environmental Protection Agency |
| EPA-1 : EPA-79FR60898 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-79FR70352 |
| Environmental Protection |
| Agency |
| |
| FPA-1 : FPA-79FR79018 |
| EPA-1 : EPA-79FR79018 Environmental Protection |

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| EPA-1 : EPA-80FR25068 |
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| Environmental Protection |
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| EPA-1 : EPA-80FR64262 |
| Environmental Protection |
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| EPA-1 : EPA-80FR65470 |
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| Environmental Protection |
| Agency |
| EPA-1 : EPA-80FR72790 |
| Environmental Protection |
| Agency EPA-1: EPA-80FR75178 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-80FR75178 |
| Environmental Protection |
| Agency |
| OSHA-1 : OSHA-81FR16286 |
| Occupational Safety & Health |
| OSHA-1 : OSHA-81FR16286 |
| Occupational Safety & Health |
| Administration |
| OSHA-1: OSHA-81FR16286 |
| Occupational Safety & Health |
| EPA-1 : EPA-81FR31234 |
| Environmental Protection |
| Agency EPA-1: EPA-81FR35824 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-81FR35944 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-81FR51102 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-77FR49490 |
| Environmental Protection |
| Agency |
| EPA-1 : EPA-82FR4594 |
| Environmental Protection |
| Agency |

Richard Moskowitz [RMoskowitz@afpm.org] From:

11/21/2017 9:17:48 PM Sent:

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Baptist, Erik [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=10fc1b085ee14c6cb61db378356a1eb9-Baptist, Er]

Subject: BBD imports - new data

Attachments: AFPM - U.S. Imports of Biodiesel (Sept 2017).pdf; EPA ltr re BBD imports 112117 FINAL.pdf

Bill,

I hope you are settling in to your new role. Attached is a letter transmitting trade data confirming that biodiesel imports from Argentina and Indonesia have ceased. Please consider this information as you complete work on the 2018 RFS final rule.

Richard Moskowitz General Counsel

American Fuel & Petrochemical Manufacturers

Sent from my iPhone - Please excuse brevity and typos.

U.S. Imports of B100 Biodiesel and Blends Containing Less Than 70% Petroleum or Bituminous Oils by Weight* Annual 2016 - YTD Sep 2017

| | | | | | | Qu | antity (kilograms | | | | | | | |
|--|---|---|--|--|--|---|---|---|--|---|---|---|--|--|
| | Jan 16 | Feb 16 | Mar 16 | Apr 16 | May 16 | Jun 16 | Jul 16 | Aug 16 | Sep 16 | Oct 16 | Nov 16 | Dec 16 | YTD Sep 16 | Ann 2016 |
| Argentina | 6,835,872 | 19,949,919 | 36,312,921 | 74,047,666 | 101,061,149 | 115,325,364 | 166,246,784 | 159,727,818 | 150,540,810 | 182,200,556 | 201,816,726 | 260,972,094 | 830,048,303 | 1,475,037,679 |
| Indonesia | · · · - | · · · · - | 17,324,524 | 29,840,760 | 37,732,972 | 59,787,618 | 33,075,963 | 45,028,787 | 51,252,039 | 33,385,309 | 52,745,395 | 9,500,916 | 274,042,663 | 369,674,283 |
| Canada | 22,710,936 | 10,564,848 | 28,137,990 | 33,503,972 | 28,354,915 | 33,315,170 | 29,202,121 | 37,463,084 | 38,210,085 | 21,233,704 | 23,461,600 | 52,415,509 I | 261,463,121 | 358,573,934 |
| Germany | | 400 | 9,570,052 | 16,400 | , , | ,, | ,, | ,, | 9,100,040 | 9,229,281 | 19,874,359 | 34,760,853 I | 18,686,892 | 82,551,385 |
| Korea | _ | - | -,, | 7,503,680 | _ | 6,984,316 | 8,095,764 | 16,044,013 | -,,- | 7,999,110 | 9,507,639 | 13,528,148 | 38,627,773 | 69,662,670 |
| All Others | 20 | - | _ | 8,402,000 | _ | 3,100 | 697,935 | 25,440 | 352,834 | 250,780 | 201,260 | 123,049 | 9,481,329 | 10,056,418 |
| Total | 29,546,828 | 30,515,167 | 91,345,487 | 153,314,478 | 167,149,036 | 215,415,568 | 237,318,567 | 258,289,142 | 249,455,808 | 254,298,740 | 307,606,979 | 371,300,569 | | 2,365,556,369 |
| | | | | | | | | | | | | ,, | | |
| | Jan 17 | Feb 17 | Mar 17 | Apr 17 | May 17 | Jun 17 | Jul 17 | Aug 17 | Sep 17 | Oct 17 | Nov 17 | Dec 17 | YTD Sep 17 | % Chg YTD |
| Argentina | - | 61,352,660 | 94,715,152 | 76,197,589 | 109,059,180 | 230,463,641 | 214,562,362 | 181,353,019 | - | - | - | - 1 | 967,703,603 | 16.6% |
| Indonesia | _ | · · · · · | · · · | · · · · | · · · · - | · · · · - | 60,000 | · · · · - | _ | _ | _ | - i | 60,000 | -100.0% |
| Canada | 13,497,524 | 17,521,036 | 14,193,177 | 21,226,121 | 24,750,866 | 17,100,231 | 23,574,145 | 37,957,815 | 24,390,707 | _ | - | - i | 194,211,622 | -25.7% |
| Germany | ,, | | ,, | ,, | | ,, | ,, | ,, | | _ | _ | - 1 | ,, | -100.0% |
| Korea | _ | _ | _ | - | | _ | _ | | 7,612,114 | _ | _ | - 1 | 7,612,114 | -80.3% |
| All Others | 502,280 | 519,160 | 39,465 | 1,400 | 15,952 | 34,180 | | | 41,584 | | | | 1,154,021 | -87.8% |
| Total | 13,999,804 | 79,392,856 | 108,947,794 | 97,425,110 | 133,825,998 | 247,598,052 | 238,196,507 | 219,310,834 | 32,044,405 | | | | 1,170,741,360 | -18.3% |
| TOTAL | 13,333,004 | 73,332,630 | 100,347,734 | 37,423,110 | 133,623,336 | 247,336,032 | 230,130,307 | 213,310,034 | 32,044,403 | | | | 1,170,741,300 | -10.370 |
| | | | | | | Val | ue (Customs, USD | 1 | | | | | | |
| | Jan 16 | Feb 16 | Mar 16 | Apr 16 | May 16 | Jun 16 | Jul 16 | Aug 16 | Sep 16 | Oct 16 | Nov 16 | Dec 16 | YTD Sep 16 | Ann 2016 |
| Argentina | 4,969,269 | 15,760,436 | 27,877,992 | 54,078,930 | 80,705,234 | 87,924,733 | 135,112,512 | 125,677,331 | 120,611,044 | 153,016,798 | 168,127,114 | 225,956,431 | 652,717,481 | 1,199,817,824 |
| Indonesia | · · · · | · · · · - | 11,370,073 | 19,646,876 | 27,197,661 | 44,878,737 | 24,181,791 | 34,303,009 | 37,716,469 | 24,434,839 | 39,462,720 | 5,083,676 | 199,294,616 | 268,275,851 |
| Canada | 17,061,760 | 8,209,750 | 21,591,317 | 27,528,469 | 29,124,082 | 39,572,889 | 26,374,492 | 33,213,048 | 35,297,753 | 20,020,156 | 22,213,223 | 50,723,219 | 237,973,560 | 330,930,158 |
| Germany | | 5,584 | 7,294,734 | 21,123 | ,, | ,-,-, | ,, | ,, | 8,557,314 | 8,776,568 | 17,387,410 | 35,136,968 | 15,878,755 | 77,179,701 |
| Korea | _ | 2,55 | .,25.,75. | 6,963,314 | _ | 5,994,755 | 7,405,150 | 14,242,382 | - | 7,308,291 | 8,573,303 | 12,110,395 | 34,605,601 | 62,597,590 |
| All Others | 5,909 | | | 3,280,964 | | 9,285 | 811,657 | 27,446 | 436,104 | 280,116 | 216,782 | 605,278 | 4,571,365 | 5,673,541 |
| Total | 22,036,938 | 23,975,770 | 68,134,116 | 111,519,676 | 137,026,977 | 178,380,399 | 193,885,602 | 207,463,216 | 202,618,684 | 213,836,768 | 255,980,552 | 329,615,967 | 1,145,041,378 | 1,944,474,665 |
| 10101 | 22,000,000 | 23,573,770 | 00,10-1,110 | 111,010,070 | 107,020,077 | 170,000,000 | 133,003,002 | 207,100,220 | 202,020,000 | 210,000,700 | 100,000,001 | 020,010,007 | 1,110,012,070 | 2,011,171,1000 |
| | Jan 17 | Feb 17 | Mar 17 | Apr 17 | May 17 | Jun 17 | Jul 17 | Aug 17 | Sep 17 | Oct 17 | Nov 17 | Dec 17 | YTD Sep 17 | % Chg YTD |
| Argentina | | | | | | | | | | | | | | |
| | | 51,751,498 | 78,758,858 | 62,944,557 | 82,725,097 | 170,714,229 | 157,879,787 | 133,776,609 | - | - | - | - ! | 738,550,635 | 13.2% |
| Indonesia | - | 51,/51,498 | /8,/58,858 - | 62,944,557 - | 82,725,097 - | 170,714,229 | 157,879,787 71,400 | 133,776,609 | - | - | - | : i | 738,550,635 71,400 | 13.2% -100.0% |
| Indonesia Canada | | | | | 82,725,097 - 20,093,945 | | | | - - 22,425,105 | - | - | 1 | 71,400 | |
| Canada | - 11,986,227 - | - | - | - | - | - | 71,400 | · · · · · · | - - 22,425,105 - | - - - | - - - | 1 | | -100.0% |
| Canada Germany | 11,986,227 | - | - | - | - | - | 71,400 | · · · · · · | - | - - - - | - - - - | 1 | 71,400 166,308,224 - | -100.0% -30.1% -100.0% |
| Canada Germany Korea | 11,986,227 - - | 15,314,479 - - | 9,093,954 - - | 16,787,475 - - | 20,093,945 - - | 15,086,571 - - | 71,400 | · · · · · · | 6,593,606 | - - - - | - - - - - | 1 | 71,400 166,308,224 - 6,593,606 | -100.0% -30.1% -100.0% -80.9% |
| Canada Germany | 11,986,227 - - - <i>574,196</i> | - 15,314,479 - - - 592,907 | 9,093,954 - - - 46,205 | - 16,787,475 - - - 4,270 | 20,093,945 - - - 40,654 | 15,086,571 - - - 45,426 | 71,400 20,375,528 - - - | 35,144,940 - - - | - 6,593,606 <i>53,941</i> | - - - - - - | - - - - - | - I - I - I | 71,400 166,308,224 - 6,593,606 1,357,599 | -100.0% -30.1% -100.0% -80.9% -70.3% |
| Canada Germany Korea <i>All Others</i> | 11,986,227 - - | 15,314,479 - - | 9,093,954 - - | 16,787,475 - - | 20,093,945 - - | 15,086,571 - - | 71,400 | · · · · · · | 6,593,606 | - - - - - - | - - - - - - - | - I - I - I | 71,400 166,308,224 - 6,593,606 | -100.0% -30.1% -100.0% -80.9% |
| Canada Germany Korea <i>All Others</i> | 11,986,227 - - - <i>574,196</i> | - 15,314,479 - - - 592,907 | 9,093,954 - - - 46,205 | - 16,787,475 - - - 4,270 | 20,093,945 - - - 40,654 | 15,086,571 - - - 45,426 | 71,400 20,375,528 - - - | 35,144,940 - - - | - 6,593,606 <i>53,941</i> | - - - - - - | - - - - - - - - | - I - I - I | 71,400 166,308,224 - 6,593,606 1,357,599 | -100.0% -30.1% -100.0% -80.9% -70.3% |
| Canada Germany Korea <i>All Others</i> | 11,986,227 - - - <i>574,196</i> | - 15,314,479 - - - 592,907 | 9,093,954 - - - 46,205 | - 16,787,475 - - - 4,270 | 20,093,945 - - - 40,654 | 15,086,571 - - - 45,426 | 71,400 20,375,528 - - - - - 178,326,715 | 35,144,940 - - - | - 6,593,606 <i>53,941</i> | - - - - - - - Oct 15 | - - - - - - - Nov 16 | - I - I - I | 71,400 166,308,224 - 6,593,606 1,357,599 | -100.0% -30.1% -100.0% -80.9% -70.3% |
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Source: U.S. Department of Commerce and USITC

ED_002061_00183721-00001

^{*}consisting of HTS #s 3826.00.1000 (Biodiesel not containing petroleum oils or oils obtained from bituminous materials (B100)) and 3826.00.3000 (Biodiesel mixtures, not containing or containing less than 70 percent by weight of petroleum oils or oils obtained from bituminous materials).



Richard Moskowitz
General Counsel

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Manufacturers

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November 21, 2017

Mr. William Wehrum Assistant Administrator for Air and Radiation U.S. Environmental Protection Agency 1200 Pennsylvania Ave., N.W. Washington, D.C. 20004

RE: Biodiesel Supply - Docket EPA-HQ-OAR-2017-0091

Dear Mr. Wehrum:

On September 15, 2017, the American Fuel & Petrochemical Manufacturers ("AFPM")¹ wrote to alert EPA to a potential shortfall of biodiesel needed to comply with the Renewable Fuel Standard (RFS) mandates.² This shortfall stems in part from the effects of recent determinations by the U.S. Department of Commerce in antidumping and countervailing duty (anti-subsidy) investigations the agency is conducting with respect to imports of biodiesel from Argentina and Indonesia. We now write to inform you of the latest developments in these matters and the impact they are having on the quantities of biodiesel imported and available for compliance with the RFS mandates. This information was not available during the 2018 RFS comment period, and in light of EPA's historical reliance on imported biodiesel to satisfy the RFS mandates, the information is of central relevance to the RFS implementation rule.

On November 9, 2017, the Department of Commerce announced its affirmative final determinations that countervailable subsidies are being provided to producers and exporters of biodiesel from the Republic of Argentina and Republic of Indonesia.³ Commerce determined that the Government of Argentina has been providing unfair subsidies to Argentinian biodiesel producers at rates from 71.45 to 72.28 percent, and that the Government of Indonesia has been providing similar subsidies to Indonesian producers at rates between 34.45 to 64.73 percent.⁴ As a result of these determinations, Commerce has instructed the U.S. Customs and Border

¹ AFPM is a trade association representing high-tech American manufacturers of virtually the entire U.S. supply of gasoline, diesel, jet fuel, other fuels and home heating oil, as well as the petrochemicals used as building blocks for thousands of vital products in daily life.

² See AFPM Letter to Sarah Dunham re: Biodiesel Supply in 2017, EPA-HQ-OAR-2017-0091-4116 (Sept. 15, 2017); see also AFPM Comments in response to EPA Notice of Data Availability, EPA-HQ-OAR-2017-0091-4703 (Oct. 19, 2017).

³ Department of Commerce, Biodiesel From the Republic of Indonesia: Final Affirmative Countervailing Duty Determination, 82 *Federal Register* 53471 (Nov. 16, 2017); Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination, 82 *Federal Register* 53477 (Nov. 16, 2017).

⁴ *Id.*, *see also* U.S. Department of Commerce, Press Release, (Nov. 9, 2017), https://www.commerce.gov/news/press-releases/2017/11/us-department-commerce-issues-affirmative-final-countervailing-duty.



AFPM Letter on BBD Supply November 21, 2017 Page 2 of 3

Protection (CBP) to collect cash deposits from the U.S. importers of biodiesel from Argentina and Indonesia based on these final rates. Further, in addition to being required to post cash deposits at these final subsidy margins, U.S. importers are also required to post estimated antidumping duties (ranging from 54.36 to 69.91 percent for Argentina and at 50.71 percent for Indonesia) as a result of Commerce's preliminary antidumping duty determinations, which were announced in late October.⁵

Commerce's trade determinations are having a significant impact on shipments of imported biodiesel from these countries. Specifically, biodiesel imports from Argentina and Indonesia have all but dried up following Commerce's preliminary determinations of countervailing duties that were announced in August 2017. In September 2017, the most recent month for which data is available, no biodiesel was imported from either of these countries. Moreover, as a result of the significant cash deposits of estimated countervailing and antidumping duties that U.S. importers must now post with CBP when entering biodiesel from Argentina and Indonesia into the United States, there is virtually no prospect of significant volumes of biodiesel imports from those countries for the foreseeable future. Given the historical significance of biodiesel imports from these countries and their role in helping to achieve RFS compliance, EPA must factor these duties into the final RFS mandates for the biomass-based diesel (BBD), advance biofuel, and total renewable fuel standards. Failing to do so would be arbitrary and capricious.

AFPM requests that EPA consider this material information as it moves to finalize the 2018 RFS implementation rule. In addition, the Agency should continue to monitor EMTS entries, shipping data reflecting scheduled imports, and other information relevant to the supply of BBD available for compliance, and be prepared to address any renewable fuel supply shortfalls.

* * * *

⁵ See Department of Commerce, Biodiesel From Argentina: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, 82 Federal Register 50,391 (Oct. 31, 2017); and Department of Commerce, Biodiesel from Indonesia: Preliminary Affirmative Determination of Sales at Less Than Fair Value, 82 Federal Register 50,379 (Oct. 31, 2017).

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⁶ See Department of Commerce, Biodiesel From the Republic of Indonesia: Preliminary Affirmative Countervailing Duty Determination, 82 Federal Register 40,746 (Aug. 28, 2017); Department of Commerce, Biodiesel From Argentina: Preliminary Affirmative Countervailing Duty Determination and Preliminary Affirmative Critical Circumstances Determination, in Part, 82 Federal Register 40,748 (Aug. 28, 2017).

⁷ See Appendix (summary table reporting official monthly U.S. import statistics published by the U.S. Census Bureau and U.S. International Trade Commission).



AFPM Letter on BBD Supply November 21, 2017 Page 3 of 3

Thank you in advance for your attention to this matter. If you have any questions, please do not hesitate to contact the undersigned at (202) 552-8474.

Respectfully submitted,

Richard Moskowitz

cc: Chris Grundler William Charmley

Paul Machiele Chad Whiteman

From: Dourson, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BB29BF491D9A4C3AB569022BCD205A0A-DOURSON, MI]

Sent: 11/13/2017 8:31:35 PM

To: Wehrum, William [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: wwehrum@hunton.com

Subject: Fwd: Welcoming Bill Wehrum as the Assistant Administrator for the Office of Air and Radiation

Bill

Congratulations!

Michael

Sent from my iPad

Begin forwarded message:

From: Message from the Chief of Staff <messagefromthechiefofstaff@epa.gov>

Date: November 13, 2017 at 2:46:17 PM EST

To: Message from the Chief of Staff < message from the chief of Staff @epa.gov >

Subject: Welcoming Bill Wehrum as the Assistant Administrator for the Office of Air and Radiation

<image002.jpg>

Colleagues,

I am pleased to announce that last Thursday the U.S. Senate confirmed Bill Wehrum to serve as the Assistant Administrator for EPA's Office of Air and Radiation, and he was sworn in today. Please join me in welcoming him to EPA.

Bill has a long history of public service and his career includes over 31 years working in the environmental field through engineering, legal practice, and administrative duties. He previously served as EPA's Acting Assistant Administrator for Air and Radiation from 2005 to 2007 and also as EPA's Principal Deputy Assistant Administrator and counsel to the Assistant Administrator for Air and Radiation. He most recently worked as a partner and head of the Administrative Law Group at Hunton & Williams LLP, where his practice focused on air quality issues.

Bill comes to the agency with years of institutional knowledge that will help guide him through administering air quality issues for all Americans, and his experience will be vital to the agency's mission to bring about regulatory reforms.

I would like to give a special thanks to Sarah Dunham, who has served as Acting Administrator for the Office of Air and Radiation.

Ryan Jackson, Chief of Staff

From: Noe, Paul [Paul_Noe@afandpa.org]

Sent: 11/27/2017 5:46:56 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Atkinson, Emily [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=bb2155adef6a44aea9410741f0c01d27-Atkinson, Emily]; Bhandaram,

Sundara [Sundara_Bhandaram@afandpa.org]

Subject: RE: Meeting Request

Thank you Bill

Emily: I am copying Sundara who can help find a good time.

Best regards

Paul

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Monday, November 27, 2017 12:34 PM
To: Noe, Paul <Paul_Noe@afandpa.org>
Cc: Atkinson, Emily <Atkinson.Emily@epa.gov>

Subject: RE: Meeting Request

Hi Paul. Thanks for being flexible on the timing of this meeting. I've copied Emily Atkinson. She can work with you to find a suitable time.

From: Noe, Paul [mailto:Paul Noe@afandpa.org]
Sent: Monday, November 27, 2017 12:13 PM
To: Wehrum, Bill < Wehrum, Bill@epa.gov>

Subject: Meeting Request

Hi Bill:

On behalf of AF&PA, the National Alliance of Forest Owners, International Paper and WestRock, I'd like to request a meeting with you to discuss the status of biogenic CO2 under the Clean Air Act. We would like to meet with you before the holidays in December – i.e., before cob December 19 if possible.

Thank you,

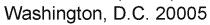
Paul

Paul Noe

Vice President for Public Policy Paul Noe@afandpa.org

Ex.6

AMERICAN FOREST & PAPER ASSOCIATION 1101 K Street, N.W., Suite 700















From: Matthew Todd [ToddM@api.org]

Sent: 12/8/2017 9:25:19 PM

To: AirAction [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=fa78b98923384078995e04a73d258d83-AirAction]

CC: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]; Gunasekara, Mandy

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=53d1a3caa8bb4ebab8a2d28ca59b6f45-Gunasekara,]; Zenick, Elliott

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=1b2eaa2a560d415fb7c8ce9bb56c7ce5-EZENICK]; Page, Steve

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=269c9581404542e79501f2bf0379a2ad-SPAGE]; Tsirigotis, Peter

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d19c179f3ccb4fadb48e3ae85563f132-PTSIRIGO]; Cozzie, David

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ee8c3582a39d4d81ac38f29a2b3abb2d-DCOZZIE]

Subject: ATTN Docket ID Nos: EPA-HQ-OAR-2017-0346 & EPA-HQ-OAR-2010-0505

Attachments: 2017 12 08 API Comments on NSPS OOOOa NODA Final.pdf

Importance: High

The American Petroleum Institute submitted the attached comments via www.regulations.gov regarding the notices of data availability in support of EPA's New Source Performance Standards ("NSPS") 40 C.F.R. Part 60 Subpart OOOOa, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements" 82 Fed. Reg. 51,788 and 82 Fed. Reg. 51,794 (both dated November 8, 2017).

Throughout the development of the oil and gas NSPS rulemaking, API has maintained a collaborative working relationship with Agency staff to provide operational and emissions data to inform the developments of these important rules. During this time, our objective has remained the identification of cost-effective emission control requirements that reduce VOC emissions for new sources and, as a co-benefit, also reduce methane. API encourages EPA to proceed with its review and revision of the underlying rule as expeditiously as possible, based on sound science and economics, considering the operational and technical issues that have already been raised in comments and litigation. API supports extension of compliance deadlines as the Agency completes this review.

Sincerely,

Matthew Todd

Matthew Todd

Ex. 6



Matthew Todd

Senior Policy Advisor

Regulatory and Scientific

1220 L Street, NW Washington, DC 20005-4070

Ex. 6 Fax 202-682-8270 Email toddm@api.org www.api.org

December 8, 2017

The Honorable Scott Pruitt, Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Attention: Docket ID Number EPA-HQ-OAR-2017-0346 & EPA-HQ-OAR-2010-0505 Submitted to the Federal eRulemaking Portal (www.regulations.gov)

Re: Notice of Data Availability in Support of "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements"

Dear Administrator Pruitt:

The American Petroleum Institute ("API") is pleased to submit the attached comments on the notices of data availability in support of EPA's New Source Performance Standards ("NSPS") 40 C.F.R. Part 60 Subpart OOOOa, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements" 82 Fed. Reg. 51,788 and 82 Fed. Reg. 51,794 (both dated November 8, 2017).

API represents over 625 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America's energy, supports more than 9.8 million jobs and 8 percent of the U.S. economy, and, since 2000, has invested nearly \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. Most of our members conduct oil and gas development and production operations and are directly impacted by these proposed actions.

Throughout the development of the 2012 oil and gas NSPS rule and its amendments in 2016, API has maintained a collaborative working relationship with Agency staff to provide operational and emissions data to inform the developments of these important rules. During this time, our objective has remained the identification of cost-effective emission control requirements that reduce VOC emissions for new sources and, as a co-benefit, also reduce methane. API encourages EPA to proceed with its review and revision of the underlying rule as expeditiously as possible, based on sound science and economics, considering the operational and technical issues that have already been raised in comments and litigation. API supports extension of compliance deadlines as the Agency completes this review.

Coincident with the publication of the Notices of Data Availability, EPA also published a memo entitled *Estimated Cost Savings and Forgone Benefits Associated with the Proposed Rule, "Oil and Natural Gas: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements"*, which contains an analysis considering foregone benefits associated with social cost of methane. API is reviewing the updated analysis provided by EPA and may provide additional comments following a more detailed review.

Please contact me at <u>toddm@api.org</u> or 202-682-8319 with any additional questions regarding the content of this submittal.

Sincerely,

/s/

Matthew Todd

cc: Bill Wehrum, USEPA
Mandy Gunasekara, USEPA
Elliott Zenick, USEPA
Steve Page, USEPA
Peter Tsirigotis, USEPA
David Cozzie, USEPA

API's Comments on EPA's Notice of Data Availability in Support of "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements"

82 Fed. Reg. 51,788 (Nov. 8, 2017)

Docket ID No. EPA-HQ-OAR-2010-0505, EPA-HQ-OAR-2017-0346

In our August 2, 2016 petition, API raised specific technical issues that warrant reconsideration and review of the rule by the Agency. These issues still require attention, as do the issues raised by others, including the Independent Petroleum Association of America (IPAA), Texas Oil and Gas Association (TXOGA), and the Gas Processors Association (GPA).

On July 27, 2017, API submitted comments¹ to the EPA regarding the legal authorities the agency possesses to extend the relevant compliance deadlines of the Subpart OOOOa provisions. On August 8, 2017, API submitted comments further expanding on some of the technical issues and challenges industry would face and currently is facing in the absence of a targeted extension of the compliance deadlines of certain rule provisions.

As described in prior comments and as further discussed below, API believes outstanding issues support the need to provide a compliance extension while the Agency considers new information and assesses its impacts as part of the reconsideration process. While the Agency has proposed to extend the compliance dates for a targeted subset of the rule requirements for two years, there is nothing preventing the agency from reconsidering these issues, along with the other technical issues raised in API's August 2, 2016 petition, in less than two years. Going forward, the Agency should consider addressing any issues, on an expedited timeline, that can be easily addressed to provide the clarity the industry is seeking.

1. EPA Has Authority Under the Clean Air Act To Stay Compliance Dates.

A. Background

On June 3, 2016, EPA finalized new source performance standards ("NSPS") for new, reconstructed, and modified sources in the oil and natural gas sector pursuant to its authority under section 111(b) of the Clean Air Act ("CAA" or "Act"). 81 Fed. Reg. 35,823 (June 3, 2016) ("2016 NSPS Rule"). The 2016 NSPS Rule was codified at 40 C.F.R. part 60, Subpart OOOOa, and is sometimes referred to as the Quad Oa Rule. API filed petitions for reconsideration with EPA seeking administrative reconsideration of the 2016 NSPS Rule. Earlier this year, EPA granted

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¹ Docket ID No: EPA-HQ-2010-0505-10577

reconsideration of four narrow issues in the 2016 NSPS Rule: (1) the fugitive emission requirements for low production well sites; (2) the process related to the alternative means of emission limitations ("AMEL") for fugitive emission requirements; (3) the standards of performance for pneumatic pumps at well sites; and (4) the requirements for certification by a professional engineer. 82 Fed. Reg. 25,730-31 (June 5, 2017). EPA also granted a three-month stay, pursuant to section 307(d)(7)(B) of the CAA, of the following three requirements in the 2016 NSPS Rule: (1) the fugitive emissions requirements (also referred to as leak detection and repair); (2) the standards of performance for pneumatic pumps at well sites; and (3) the requirements for certification by a professional engineer. *Id.* at 25,732.

In addition to the three-month stay, EPA issued a proposed rule staying compliance dates for these portions of the 2016 NSPS Rule. 82 Fed. Reg. 27,645 (June 16, 2017) ("Proposed Rule"). API filed comments in support of the Proposed Rule on July 27, 2017. American Petroleum Institute, Legal Comments on EPA's Proposed Rule (July 27, 2017), EPA-HQ-OAR-2010-0505-10577 ("API Comments"). On November 8, 2017, EPA issued a notice of data availability ("NODA") that explains in further detail the legal basis for the Proposed Rule. 82 Fed. Reg. 51,788 (Nov. 8, 2017). As EPA notes, it possesses the legal authority under sections 111(b) and 301(a)(1) of the CAA to amend the compliance deadlines in the 2016 NSPS Rule through "phase-in" periods. *Id.* at 51,791 (identifying both section 111 and section 301 as providing legal authority for the Proposed Rule); *see also* API Comments at 3-6, 12-14.

B. Section 111 of the CAA Provides the Agency With Authority To Extend the Relevant Compliance Deadlines Through Phase-In Periods.

As the NODA explains, EPA has authority under section 111 of the CAA to extend or "phase-in" the relevant compliance dates in the 2016 NSPS Rule. EPA issued the 2016 NSPS Rule under section 111(b)(1)(B) and can, as it notes, use the "same statutory authority" to extend the relevant compliance deadlines in the rule. 82 Fed. Reg. at 51,789. EPA correctly notes that agencies have inherent authority to revise or reconsider prior decisions, including "the appropriate length of the phase-in periods provided in the 2016 Rule for specific requirements, as well as whether to provide one for phasing in an additional compliance assurance measure." *Id.* at 51,790. Under this authority, EPA proposes to "extend the current phase-in periods for the fugitive emissions requirements and well site pneumatic pump requirements, as well as providing one for the requirement for certification of closed vent systems by a professional engineer." *Id.*

As discussed further below, section 111 allows EPA to establish a reasonable compliance period after the effective date of a rule and does not restrict how EPA can set compliance dates for

NSPS. Further, the statute does not proscribe when compliance must be obtained when EPA conducts a voluntary, ahead-of-schedule review of NSPS, as EPA did with the 2016 NSPS Rule.

EPA has authority under the plain language of section 111(b) of the CAA to extend compliance deadlines. Standards of performance are effective upon promulgation. 42 U.S.C. § 7411(b)(1)(B). Under the Act, however, a rule's effective date can differ from its compliance dates. For example, section 112(i) has separate, specific instructions for when a rule becomes effective and when compliance is required. *Id.* § 7412(i). This demonstrates that Congress does not consider the terms "effective date" and "compliance date" to be synonymous. *See id.* § 7412(d). Section 111 specifies when a rule must be effective but, unlike section 112, does not state when regulated sources must achieve compliance with NSPS. Consequently, EPA has discretion to establish reasonable compliance dates that are after the effective date of NSPS.

In the NODA, EPA states that it can "extend the current phase-in periods for the fugitive emissions requirements and well site pneumatic pump requirements" and establish a phase-in period "for certification of closed vent systems by a professional engineer," because agencies have inherent authority to revise or reconsider prior decisions. 82 Fed. Reg. at 51,790. As a reasonable exercise of its ability to revise rules and reconsider its decisions, the Agency may decide to revise "the appropriate length of the phase-in periods provided in the 2016 [NSPS] Rule for specific requirements, as well as whether to provide one for phasing in an additional compliance assurance measure. . . ."² Id.

EPA also has discretion to establish phase-in periods here because the 2016 NSPS Rule was the result of EPA's voluntary rulemaking, not the statutorily-required 8-year review of the oil and gas NSPS. Section 111(b)(1)(B) requires EPA to review the NSPS for each source category every 8 years, unless "such review is not appropriate in light of readily available information on the efficacy" of the NSPS. 42 U.S.C. § 7411(b)(1)(B). In 2011, EPA conducted this required review of the oil and gas NSPS and issued a proposed rule to revise the NSPS. 76 Fed. Reg. 52,738, 52,740-41, 52,754 (Aug. 23, 2011). In 2012, EPA issued a final revised NSPS based on its statutorily-required review. 77 Fed. Reg. at 49,490. The next 8-year review was not required until at least 2020, but EPA voluntarily reviewed the NSPS early, issuing the 2016 NSPS Rule

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² EPA has used this approach in several other NSPS rules, as API noted in its comments on the Proposed Rule. API Comments at 5. EPA included future compliance deadlines in a 2012 NSPS rule for the oil and gas sector and in at least two other rules. See 77 Fed. Reg. 49,490, 49,517-19 (Aug. 16, 2012) (establishing phased requirements for reduced emissions completions equipment based on availability and cost considerations); id. at 49,500, 49,525-26 (establishing a one-year phase-in period for storage vessel controls); 70 Fed. Reg. 28,606 (May 18, 2005) (establishing mercury standards under section 111 for coal-fired electric utility steam generating units using a two-step compliance program); 73 Fed. Reg. 3568 (Jan. 18, 2008) (finalizing NSPS for stationary spark ignition internal combustion engines that included delayed compliance dates).

years ahead of the statutory deadline. Thus, extending or phasing-in the relevant compliance deadlines for the 2016 NSPS Rule does not result in an extension of the statutorily-mandated schedule for 8-year review of these NSPS.

Further, EPA asserts it has discretion to issue new standards of performance regardless of the timing of the 8-year review. 82 Fed. Reg. at 51,789 ("EPA has discretion under CAA section 111(b)(1)(B) to add new standards of performance for additional pollutants or emission sources not previously covered concurrent with, or independent of, the 8-year review."); *id.* at 51,790 ("[T]here is no reason that the EPA's authority and discretion to promulgate such standards should be constrained by the timing of the 8-year review. The EPA, therefore, reasonably interprets CAA section 111(b)(1)(B) to allow the Agency to exercise its discretion to promulgate new performance standards for additional sources or pollutants when appropriate (concurrent with or independent of the 8-year review)."). EPA states it issued the 2016 Rule under this authority. *Id.* at 51,790. In such circumstances, EPA has discretion to establish phase-in requirements.³

C. Section 301(a) of the CAA Also Provides Additional Legal Support for the Proposed Rule.

In the NODA, EPA reasonably and lawfully identifies section 301(a) of the CAA as supplemental authority for its proposed phase-in of compliance deadlines for the 2016 NSPS Rule. EPA accurately notes the "broad rulemaking authority" it has under section 301. 82 Fed. Reg. at 51,790-91 (discussing section 301 case law and explaining that it justifies "phase-in" periods here). Section 301 grants EPA authority to issue "such regulations as are necessary to carry out" its obligations under the Act. 42 U.S.C. § 7601(a)(1).

API agrees with EPA's explanation in the NODA that it is necessary for EPA to extend these deadlines to carry out its obligations under the CAA. As EPA explained, a "phase-in" is necessary for the fugitive emission requirements because without it, "regulated entities would incur significant and potentially unnecessary additional costs and compliance burden to implement the 2016 Rule, and, in some cases, at the expense of disrupting or complicating compliance with applicable state programs, just to later revert back to what they were doing in the first place." 82 Fed. Reg. at 51,791. EPA promulgated the AMEL in the 2016 NSPS Rule to avoid these very problems. *Id.* As such, EPA is correct that "it is not clear that the marginal

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³ API also notes EPA's alternative authority under section 111 to establish future effective dates based on its determination of the best system of emission reduction, which was discussed in more detail in API's comments on the Proposed Rule. API Comments at 4-5.

additional emission reductions achieved during the EPA's reconsideration process outweigh the potential disruption to existing state programs and company-specific programs." *Id.*

Regarding the well site pneumatic pump requirements, EPA explains that some sources require greater clarity regarding the definition of "greenfield site" in the technical infeasibility exemption and that this provision places sources experiencing actual technical infeasibility at risk of being in noncompliance. As such, "[d]elaying these requirements until the EPA resolves this potential problem through its reconsideration process is consistent with the 2016 [NSPS] Rule to require emission reductions from well site pneumatic pumps only where it is technically feasible to do so." *Id.* EPA also notes that it is necessary for EPA to phase-in the closed vent certification requirement for a professional engineer because "EPA had not considered its cost and whether the additional assurance justifies such expenditure," which is contrary to "section 111 of the CAA, which expressly identifies cost as a factor for consideration when promulgating emission standards." *Id.*

API agrees that all of the requirements of section 301 are met here. EPA's section 301 authority is broad and addresses when regulations are necessary to carry out EPA's duties under the Act. See, e.g., NRDC v. EPA, 22 F.3d 1125, 1148 (D.C. Cir. 1994) (agreeing that EPA had authority under section 301 to issue binding basic inspection and maintenance programs rules); Specialty Equipment Market Ass'n v. Ruckelshaus, 720 F.2d 124, 138 (D.C. Cir. 1983) (holding that EPA had authority under section 301 to create a reimbursement scheme for vehicle manufacturers "even though the statute does not specifically authorize such a scheme"); Citizens To Save Spencer Cty. v. EPA, 600 F.2d 844, 873 (D.C. Cir. 1979) (upholding EPA's use of rulemaking, on the basis of section 301(a)(1), to resolve a conflict between two provisions of the Act).

EPA may use section 301 of the CAA when necessary, provided that Congress has not written a "clear impediment to the issuance" of a regulation, *NRDC v. EPA*, 22 F.3d at 1148, or no other "statutory language on point" exists, *NRDC v. EPA*, 749 F.3d 1055, 1063 (D.C. Cir. 2014).

Nothing in the CAA (or any other statute) bars EPA from using its authority under section 301(a)(1) in this instance. *See id.* Section 307(d) of the CAA cannot be deemed a more specific provision because that provision applies only to mandatory reconsideration proceedings, and EPA's reconsideration proceedings here do not meet the criteria for mandatory reconsideration. *See Clean Air Council v. Pruitt*, 862 F.3d 1 (D.C. Cir. 2017). As such, section 307(d) does not apply here. Moreover, section 705 of the Administrative Procedure Act cannot be deemed a more specific provision because it is a portion of a different statute and therefore sheds no light on EPA's CAA rulemaking authority.

Phase-in periods are necessary for EPA to meet the statutory standard under section 111 of the CAA and respect the process enshrined in section 307 of the CAA. Specifically, it would

undermine the statutory purpose and text of section 111 for EPA to require current compliance with regulations that are duplicative of state requirements, provide little or no environmental protection, impose significant compliance costs and burdens on regulated entities, and cannot be said to constitute BSER. There is nothing in the Act that is a "clear impediment" to staying the relevant compliance dates here. *NRDC v. EPA*, 22 F.3d at 1148.

Finally, there are no statutory deadlines that prevent EPA's use of section 301 here. As previously explained, EPA completed the required 8-year review of the NSPS in 2012, and the next review is not required until at least 2020. 42 U.S.C. § 7411(b)(1)(B). The provisions EPA proposes to stay here were promulgated in the 2016 NSPS Rule, which EPA undertook *after* it completed its required 8-year review of the oil and natural gas NSPS in 2012. By staying certain provisions of the 2016 NSPS Rule, EPA would not be circumventing this review cycle.

2. Support for Compliance Phase-in Extensions

In the Notices of Data Availability for both the 3-month and 2-year stays, EPA seeks comments, data, and any other information that would help the EPA determine whether a phase-in is needed for certain Subpart OOOOa requirements and, if so, the length of such period. As stated in our August 8, 2017 letter, API believes that EPA requires additional time to address issues in the rule, but our members indicate that the most concerning issues are:

- (1) Technical problems with implementation of the rule for specific and unique operational situations that create untenable situations for meeting compliance, and
- (2) Certain requirements and associated burden on operators that provide little or no environmental benefits.

With respect to the technical problems raised in previous comments, it is noted that the problems are generally not widespread issues (e.g. delay of repair scenarios, addressing leak detection requirements in very cold environments, etc.). The fugitive emission compliance obligations were only effective for two months and the pneumatic pump requirements were effective for less than one year during the initial compliance period for Subpart OOO0a. Therefore, many of the issues raised in API's reconsideration request and in our prior comments on the stays may not be reflected in most initial compliance reports submitted earlier this fall. However, it is also critically important to note that it is not possible to predict when applicable sources could experience the technical issues API has raised. Without a compliance extension to allow time to revise certain aspects of the rule, operators are exposed to potential non-compliance scenarios.

One example of a potential noncompliance scenario is the inability to conduct fugitive emission surveys for prolonged periods of time in cold weather environments. For example, as stated in ConocoPhillips Alaska Inc.'s letter dated December 4, 2015, temperatures on the Alaskan North Slope can remain below the acceptable range for operation of leak detection equipment for four or more consecutive months. This not only limits the periods that semi-annual surveys can be conducted at well sites located on the North Slope, but also makes it impossible to complete the initial monitoring surveys within 60 days during winter months for a new or modified well site. EPA has previously set precedent within Subpart OOOO and Subpart OOOOa to address such challenges. The rules currently allow for an exemption from LDAR in §60.5401(e) and §60.5401a(e) for natural gas processing plants located on the Alaskan North slope. Consistent with this precedent, API recommends EPA consider similar exemptions from LDAR for well sites and compressor stations on the Alaskan North Slope.

More generally, there are similar instances for other locations that experience extreme cold weather (e.g., assets in North Dakota and Wyoming) such that winter temperatures may stay below the acceptable range to operate the leak monitoring equipment throughout the initial 60 days of operations a new or modified well site. EPA recognized this challenge by providing a waiver due to cold temperatures in §60.5397a(g)(5) for compressor stations. API recommends that EPA also provide a similar waiver for well sites.

Another example is specific to the delay of repair requirements found in §60.5397a(h)(2). If specialty parts are not available and need to be ordered or if a certain repair on a specific leak would take a prolonged period of time to complete, operators could be forced to reconcile a customer demand (e.g., feed of fuel to a power plant) by restarting a compressor after an unplanned event (e.g., equipment trip) against remaining shutdown for prolonged period of time to enable the repair of what could be a very small and insignificant leak. See further discussion of such leak repair scenarios in Section 3.b. of this letter.

In our December 4, 2015 comments on the draft Subpart OOOOa rule, API expressed the need for a phase-in period for certain provisions (e.g., leak detection and repair at wells sites and compressor stations, control of pneumatic pumps, etc.) and EPA provided time for phasing-in these requirements in the final rule. While some operators may be experiencing challenges linked to the availability of resources, the primary objective for an extension of the compliance deadlines is to allow EPA enough time to address the issues on record. This includes fixing technical problems with the rule, providing clarifying language better reflecting EPA's intent, and removing or otherwise addressing requirements that were not properly considered during the notice and comment process. In parallel, this time will allow the Agency to properly consider new information and assess its impacts as part of the reconsideration process.

API encourages the Agency to work as quickly as possible to address the issues raised in the reconsideration process. While many issues can be fixed in less than 2 years, providing up to 2

years is appropriate to avoid further extension of compliance deadlines. API sees no reason that more than 2 years' time would be required.

3. Fugitive Emissions Requirements

a. 3rd Party Equipment (e.g., equipment such as meters owned by midstream operators):

As stated in API's August 8, 2017 letter, the leak monitoring and repair requirements should not apply to all equipment at a well site or compressor station regardless of ownership. As an initial matter, the potential emissions from fugitive midstream equipment at well sites are insignificant to the costs associated with establishing leak detection and repair programs. Further, based on the definition of a "well site", it can be interpreted that EPA intends the definition of a well site to apply to the producers' operations at the well site, and not ancillary equipment separately owned and maintained by third-party midstream companies. As set forth in the definition, a well site means "one or more surface sites...constructed for the drilling and subsequent operation of any oil well, natural gas well, or injection well." It is the producer of the well that constructs, drills and operates the well. As stated in the NODAs, this definition has resulted in "confusion as to the appropriate scope of components that are included in the definition of the well site for the fugitive emission requirements," particularly with respect to "ancillary midstream assets (e.g., meters)" that are "owned by legally distinct companies from the well site owner and operator and could have limited emissions." 82 Fed. Reg. at 51,798; 82 Fed. Reg. at 51,792

In addition, midstream operators have no way of confirming and controlling when a well site may become modified and subject to the leak detection and monitoring requirements for well sites. In §60.5365a(i)(3), the requirements that trigger modification of well sites includes any time a new well is drilled, or when an existing well is hydraulically fractured, or refractured. Midstream operators have no control over, nor advance knowledge of, when a well site operator takes actions that may constitute a modification. There are many instances where insignificant equipment owned by a midstream company, such as a meter run, is located at a well site along with equipment owned and operated by the producer. There are legal and logistical issues that can prevent the midstream operator from being able to comply with Subpart OOOOa for that small piece of equipment based on actions made by another operator. This presents significant practical issues with renegotiating contractual obligations on the thousands of sites that may eventually be impacted by these requirements, particularly as facilities are modified over time. It is not a reasonable expectation that these arrangements can readily provide for these circumstances.

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⁴ At least one member company has hundreds of locations currently affected and another member company estimates thousands of locations will eventually be affected as sites are modified.

API recommends EPA provide clarification that midstream equipment are not part of the definition of a well site, and the requirements were intended to be applicable to the well site operator only.

b. Delay of Repair

As API commented in our August 8, 2017 letter, while the concept of delayed repair is appropriate and necessary, the current rule language describes events that may not present safe conditions to perform leak repair. The delay of repair provisions as written do not reflect the realities of well site and compressor station operation, where blowdowns can occur as part of standard operations to prevent safety concerns. Unscheduled and emergency shutdowns occur from time to time, and can last a very short time before service is returned. As written, the rule requires operators to make repairs following a blowdown or during an unscheduled or emergency shutdown and this requirement does not allow adequate time to make certain repairs that require specialty parts, logistical prearrangements, skilled labor, etc. Specialty parts are sometimes required to be ordered from the manufacturer and may take longer than 30 days to arrive, which creates an untenable situation for completing the repair within 30 days in absence of a delay of repair provision specific to parts availability. This is especially a concern for locations on the Alaska North Slope that contain custom parts designed for the Arctic environment.

While these situations will occur infrequently and most repairs will be completed expeditiously, operators must have flexibility to delay repair when warranted. Although such situations are expected to be uncommon, the rule requirements have the potential to lead to prolonged shutdowns that could last days or weeks. For example, during the recent hurricane events in Texas and Florida, certain compressor stations experienced emergency shutdowns that were unplanned. If a compressor station was subject to Subpart OOOOa and had previously identified a leak that was on delay of repair, at least a portion of the compressor station (where the leak is occurring) would have had to remain offline for additional time until the leak could be repaired per the current requirements. Coordinating such repair during such a natural disaster event, especially if a specialty part is required to complete repair for a fugitive emission source, is not reasonable and the impacts and cost impacts of such a scenario were certainly not considered by EPA during the rulemaking process.

In some cases, such as on the Alaska North Slope and northern areas of the lower 48 states, the shutdown of a facility or a group of facilities in the winter can pose significant risks, including potentially the lack of primary electricity generation and space heating, and the potential for idle flow lines to gel or freeze. Backup diesel power generation is available only in limited capacities, and has higher emissions than gas turbines. In such extreme cases, bringing critical facilities back on line should not be delayed for relatively minor repairs for fugitive emissions.

The rule should allow for such overriding considerations and not put the operator in a position of having to elect between regulatory compliance and prudent facility operations.

Additionally, the language in §60.5397a(h)(2) presumes that various compressor station shut down events and well shut-ins would necessarily result in the blow down of all equipment located on site (including the component on delay of repair). This is not accurate. For example, some equipment on site may remain isolated, but under pressure (such as the line pressure of the site). As written, the rule language could be interpreted to mean that all equipment must be depressurized during a shutdown in order to repair the fugitive leak. In such circumstances, the emissions from forcing blow down of all equipment can be greater than the emissions associated with the component leaking on delay of repair.

There are several instances where a well is shut in automatically or manually for a very short period of time before production is restarted. Specifically, there are many well sites that have a flash gas compressor on site to collect gas from a low pressure separator or have a VRU that collects flash gas from storage tanks. These units compress the gas to a pressure sufficient to get the gas into a sales line. Depending on the remoteness of the well site and other factors, some operators will configure the equipment instrumentation so that when a flash gas compressor and/or a VRU trips offline, the well is automatically shut-in to prevent a short-term release of gas from pressure relief valves. A well could also be shut-in due to an emergency of some type, a fault in instrumentation, or a power outage. In most of these cases, the process equipment is not depressurized so that the well can be brought back into production and normal operations resumed as quickly as possible. If a fugitive component on delay of repair located at a well site with this type of configuration would need to be repaired prior to restart, it could result in the blowdown of pressurized equipment in order to fix a potentially small leak. This can result in significant cost to the operator due to lost revenue for a very small benefit, if any, to the environment considering the potential need to blowdown equipment for the repair.

API does not believe EPA's intent was to create such scenarios described and recommends the Agency provide clarification related to the delay of repair provisions to mitigate these technical, safety, and environmental issues.

API encourages the Agency to work as quickly as possible to address the issues raised in the reconsideration process. While many issues can be fixed in less than 2 years, providing up to 2 years is appropriate to avoid further extension of compliance deadlines. API sees no reason that more than 2 years' time would be required.

c. Alternative Means of Emission Limitation Provisions

Adherence to the Clean Air Act Section 111(h) outlines the procedures for Alternative Means of Emission Limitation (AMEL) work practices, which includes a process that is labor intensive, time consuming and provides little incentive for operators to participate. As API stated in our August 8, 2017 letter, the AMEL provisions included in the rule are not sufficiently clear to facilitate effective application and approval of AMEL, and therefore fail to serve their intended

purpose. The ability to apply for and obtain AMEL for fugitive emissions requirements determines whether operators of well sites and compressor stations, in particular those subject to existing state programs or those which have invested in emerging technology, must redirect or expend additional resources and efforts to implement the 2016 Rule's fugitive emissions requirements. This is negatively impacting and complicating compliance with applicable state programs and will hinder progress in using emerging technology - all while providing little to no incremental environmental benefit.

API agrees the Agency requires additional time to review the proposed AMEL process and reduce burden for Industry where duplicative requirements occur or where emerging technology has been identified.

4. Pneumatic Pumps

a. Greenfield sites

As stated in API's August 8, 2017 letter, pneumatic pumps at "greenfield" well sites are not currently eligible to claim technical infeasibility associated with the control of an affected pneumatic pump. Due to lack of clarity regarding EPA's intent, the current rule language puts operators into a potentially untenable situation. This occurs if regulatory authorities interpret a "greenfield" well site as synonymous with "new" for Subpart OOOOa, thereby removing future technical infeasibility determinations for the entire life of a well site. It is unclear if a well site remains a greenfield site for the entire life of the well or only for a short period of time.

Initial design for construction of a greenfield site may not require installation of a pneumatic pump or a control device for the early operational period of a well site. At some point later in the life of a well (which could be years), site design requirements may change where a new control and/or pump is installed and a technical infeasibility determination is justified but not available if the site is considered greenfield throughout the life of the site. Further, even for a new site, process or control device design requirements may not be compatible with controlling pneumatic pump emissions.

Some examples include the following:

- A new site contains equipment owned and operated by two different entities and the
 owner/operator of an affected pneumatic pump is not the owner/operator of a control
 device located at the same site. For instance, a dehydration unit owned and operated
 by the gathering company could have a control device, but the well site owner or
 operator cannot route the pump emissions to the gathering company's control device.
- A new site design only requires installation of a high pressure flare to handle emergency and maintenance blowdowns. It may not be technically feasible for a low pressure pneumatic pump discharge to be routed to a high pressure flare. In addition, the flare

- or other combustion device may have a rated heat capacity that would be exceeded if the discharge of pump were to be sent to it.
- Another and likely more common example would be if a new greenfield site design calls for installation of a pneumatic diaphragm pump but no control device is present. Only a process heater or boiler is present at the facility. The design and operation of a given pneumatic pump and co-located process heater or boiler may not be compatible. The heater and boiler will be designed based on the process it needs to support without regard to the additional capacity or operational need to control a pneumatic pump. More specifically, due to the small size (generally 125,000 Btu per hour to 2.5 mmBtu per hour) of many heaters or boilers used at well sites, burner capacity may be insufficient to compensate for emission combustion of additional large pneumatic diaphragm pump discharge and may result in frequent safety trips and burner flame instability (i.e., high temperature limit shutdowns, loss of flame signal, etc.).
 Additionally, industry guidelines (i.e., NFPA 86) would prohibit the use of boilers or heaters as control devices where the following criteria are not met: the operating temperature must be a minimum of 1400°F, emission source safety interlocks, etc.

EPA can address the greenfield issues by providing clarification that allows for technical infeasibility determinations at all well sites (and not just at non-greenfield sites). Additionally, EPA should clarify that heaters and boilers are not considered control devices with respect to pneumatic device provisions under Subpart OOOOa. It is noted that additional time to phase in the requirements as written will not address the issues API has raised. Rather, the time will allow for EPA to appropriately review and provide clarifications.

5. Professional Engineer Certifications

Under current rule provisions, many companies face additional costs and project delays for a third-party Professional Engineer (PE) to design and certify closed vent systems and/or certify technical infeasibility associated with control of a pneumatic pump. As an update to our prior comments, API members report costs from \$2,000 - \$9,000 per certification; with actual cost dependent on the site complexity and thus the amount of engineering design time involved.

Some challenges experienced by operators include the following:

- Multiple member companies have had difficulty finding professional engineers willing to certify the design based on the certification statement included within the rule.
 Engineers were concerned with the liability of the statement and whether they had sufficient insurance or bonding to cover such a certification.
- At least one state, Wyoming, is taking a position that PE certifications for sources located in that state must be completed by a PE registered in Wyoming. While EPA indicated that this was not their intent, EPA failed to determine how state regulations or

- practices might result in such situations. This new, unanticipated additional burden is not trivial and can result in material cost and schedule impacts on operators.
- At least one member company has experienced additional burden with obtaining the PE certification for a new tank installed at an existing facility. In this instance, the third-party consultant would not certify the closed vent system (CVS) individually, since this specific contractor did not originally design the entire facility-wide system. While the CVS system met engineering best practices, the certification could not be provided since this professional engineer was not willing to certify only a portion of the overall process operations / system.
- Since certification is on the design specifications of the facility and not necessarily only
 the CVS, any alteration at the facility must be re-reviewed, no matter how material the
 change may be to the operation of the CVS. Therefore, costs incurred to maintain PE
 certifications are generally ongoing and not a one-time expense.

A technical assessment of a closed vent system by a qualified person is an appropriate action for compliance assurance of the emission standards for storage vessels, compressors and pneumatic pumps. However, the certification requirement to have the assessment performed by a licensed Professional Engineer presents additional challenges and unintended costs than EPA considered when finalizing these requirements. Meanwhile, the PE certification process does not add significant environmental benefit to the rule provisions since there are provisions in place for ongoing compliance specific to the operation of closed vent systems, a general duty for all operators to minimize environmental impacts, and annual report submittals must be approved by a certifying official.

Therefore, API recommends EPA clarify that technical assessments can be performed by a qualified person in oil and gas facility design and does not require additional certification by a licensed Professional Engineer for both CVS and for the technical infeasibility assessment associated with control of a pneumatic pump.

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 11/21/2017 5:21:57 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Receipt from ermias shenkut

Happy to help.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] **Sent:** Tuesday, November 21, 2017 12:21 PM

To: Gill, Julia Zemnick

Subject: RE: Receipt from ermias shenkut

This is it. Thank you very much.

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Tuesday, November 21, 2017 9:26 AM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov > **Subject:** FW: Receipt from ermias shenkut

Hi Bill,

Is this the one you were looking for? There were two others, but they were from October.

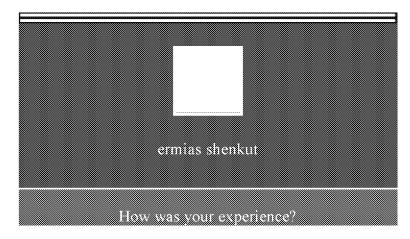
From: ermias shenkut via Square [mailto:receipts@messaging.squareup.com]

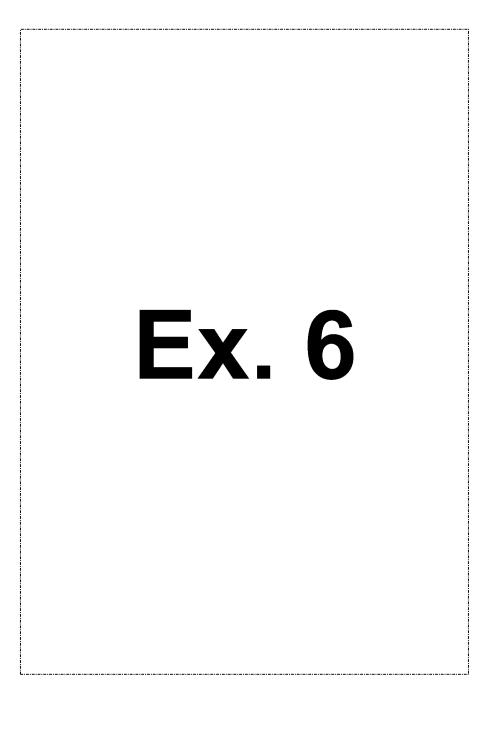
Sent: Thursday, November 16, 2017 9:12 PM

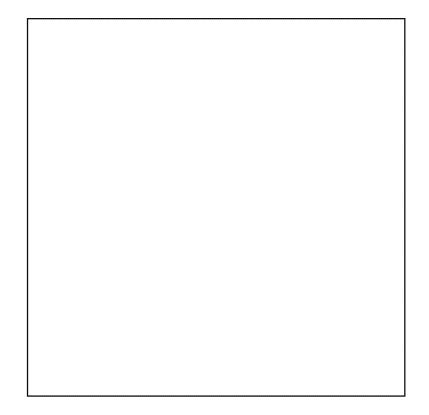
To: Wehrum, William L.

Subject: Receipt from ermias shenkut

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ermias shenkut

Ex. 6

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Manage preferences for digital receipts



Barnes, Felicia [FBarnes@hunton.com] From:

Sent: 12/12/2017 4:58:37 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject:

Ex. 6

Sent from my iPhone

On Dec 12, 2017, at 11:12 AM, Barnes, Felicia <FBarnes@hunton.com<mailto:FBarnes@hunton.com>> wrote:

Ex. 6

-Felicia

From: Barnes, Felicia

Sent: Tuesday, December 12, 2017 7:13 AM To: Wehrum, Bill

Subject: Re: Lunch

Yes, that works for me. Sent from my iPhone

On Dec 12, 2017, at 5:10 AM, Wehrum, Bill wehrum.Bill@epa.gov> wrote:

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

From: Jaber, Makram [mjaber@hunton.com]

Sent: 11/21/2017 11:21:22 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Invitation to speak

Dear Bill,

On behalf of American Electric Power, The Southern Company, Duke Energy, Dominion Energy, and the Utility Air Regulatory Group, I am pleased to invite you to speak to our group regarding air regulations and regulatory outlook. Our meeting is on the afternoon of Thursday, December 7, and the morning of Friday, December 8. We are flexible in terms of what time you would speak to us within those periods, so we ask you to let us know what time would be best for you.

Best Regards,

Makram



Makram Jaber

Partner

mjaber@hunton.com

Ex.6

f 202.828.3750

bio | vCard

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 hunton.com

This communication is confidential and is intended to be privileged pursuant to applicable law. If the reader of this message is not the intended recipient, please advise by return email immediately and then delete this message and all copies and backups thereof.

Knauss, Chuck [CKnauss@hunton.com] From:

11/28/2017 7:56:23 PM Sent:

To: Jaber, Makram [mjaber@hunton.com]; Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]; Field, Andrea

[afield@hunton.com]; Nickel, Henry [hnickel@hunton.com]

Subject: RE: Lunch

I'm in also.

----Original Message----

From: Jaber, Makram

Sent: Tuesday, November 28, 2017 1:56 PM

To: Wehrum, Bill; Field, Andrea; Nickel, Henry; Knauss, Chuck

Subject: RE: Lunch

Looks like Chuck's e-mail was incorrect in the original, so I am resending with his correct e-mail.

----Original Message----

From: Jaber, Makram

Sent: Tuesday, November 28, 2017 9:11 AM To: 'Wehrum, Bill'; Field, Andrea; Nickel, Henry; cknauss@hinton.com

Subject: RE: Lunch

Count me in!

----Original Message----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] Sent: Monday, November 27, 2017 10:32 PM

To: Jaber, Makram; Field, Andrea; Nickel, Henry; cknauss@hinton.com

Subject: Lunch

Would the lunch crew consider an "away game" to accommodate an expat? Maybe this Friday the 1st at noon at Au Bon Pain in International Square? No substance.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

Gill, Julia Zemnick [jgill@hunton.com] From:

12/4/2017 11:30:15 PM Sent:

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject:

Thanks so much.

Julia Zemnick Gill Senior ALG Team Manager

On Dec 4, 2017, at 6:21 PM, Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Yes, I can open the attachment. I'll get back to you soon.

----Original Message----

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Monday, December 4, 2017 6:14 PM

To: Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>>

Subject: Fwd: Time

Bill, can you open the attachment?

Julia Zemnick Gill Senior ALG Team Manager

Begin forwarded message:

From: "Gill, Julia Zemnick" <jgill@hunton.com<mailto:jgill@hunton.com><mailto:jgill@hunton.com>>

Date: November 17, 2017 at 9:59:23 AM EST

To: "Wehrum, Bill" <wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>>

Subject: RE: Time

Bill,

Please let me know if this works.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, November 17, 2017 8:08 AM To: Gill, Julia Zemnick

Subject: Time

Hi Julia. I belatedly realized that I entered no time for November. I don't have that much, but it probably makes sense for me to get it in. Can you send me my calendar for November? That will help me figure out what is should enter. Thanks.

From: Knauss, Chuck [CKnauss@hunton.com]

Sent: 1/5/2018 2:53:21 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: FYI

Attachments: 2017-12-31 Mary Nichols Quoted in Guardian Article Re US Emission Standards.pdf - Adobe Acrobat Pro-c.pdf

"This Environmental Protection Agency doesn't seem to have met an air regulation that it likes," said Mary Nichols, chair of the California Air Resources Board and a former EPA assistant administrator. "I've not seen any evidence that this administration knows anything about the auto industry, they just seem to be against anything the Obama administration did. "Vehicle emissions are going up, so clearly not enough is being done on that front. The Trump administration is halting further progress at a critical point when we really need to get a grip on this problem."

••••

Nichols said she had been disturbed by signals coming from Pruitt and other EPA officials that she said show the federal government is looking to end California's waiver. "We are very concerned because these standards are the bedrock of our whole climate change platform," she said. "Scott Pruitt has made threatening noises about the Californian waiver, saying that we are trying to run the country. It feels like this is going to be the next shoe to drop. If it does, we will litigate and fight for our rights in the political arena with other states and consumer advocates."



Vehicles are now America's biggest CO2 source but EPA is tearing up regulations

Transport overtook power generation for climate-warming emissions in 2017 but the Trump administration is reversing curbs on auto industry pollution

Oliver Milman

Mon 1 Jan '18 00.00 EST

Some of the most common avatars of climate change - hulking power stations and billowing smokestacks - may need a slight update. For the first time in more than 40 years, the largest source of greenhouse gas pollution in the US isn't electricity production but transport - cars, trucks, planes, trains and shipping.

Emissions data has placed transport as the new king of climate-warming pollution at a time when the Trump administration is reviewing or tearing up regulations that would set tougher emissions standards for car and truck companies. Republicans in Congress are also pushing new fuel economy rules they say will lower costs for American drivers but could also weaken emissions standards.

Opponents of the administration fret this agenda will imperil public health and hinder the effort to address climate change.

"This Environmental Protection Agency doesn't seem to have met an air regulation that it likes," said Mary Nichols, chair of the California Air Resources Board and a former EPA assistant administrator. "I've not seen any evidence that this administration knows anything about the auto industry, they just seem to be against anything the Obama administration did.

"Vehicle emissions are going up, so clearly not enough is being done on that front. The Trump administration is halting further progress at a critical point when we really need to get a grip on this problem."

The 1970 Clean Air Act, signed by Richard Nixon, set standards for a cocktail of different pollutants emitted from new vehicles. New cars and trucks, which account for more than 80% of transport emissions, now have to meet fuel efficiency standards and display this information to consumers. This approach has helped cleanse previously smog-laden American cities and tamp down greenhouse gas emissions.

But in 2016, about 1.9bn tons of carbon dioxide emissions were emitted from transportation, up nearly 2% on the previous year, according to the Energy Information Administration. This increase means that transport has overtaken power generation as the most polluting sector in the country, and it's likely to stay that way.

Cheap gasoline prices have led to a recent uptick in vehicle emissions, despite the fuel standards, at the same time that coal is being rapidly displaced by an abundance of cheap natural gas and the steady rise of renewable energy, driving a sharp decline in CO₂ emissions from the power grid.

While coalminers have lost their jobs to technological advancement and environmental protesters have thrown their bodies in the path of oil pipelines, there has been far less to disrupt the basic emissions-emitting models of cars, trucks and planes.

Americans are buying larger cars and taking more flights - domestic aviation emissions grew 10% between 2012 and 2016 - and face little opposition in doing so.

"The change in power generation has been very impressive over the past 10 to 15 years," said Brett Smith, assistant director of the Center for Automotive Research.

"In the automotive sector, there isn't the same push. There are certainly Americans concerned about global warming but people are driving bigger and bigger vehicles each year. It's not a priority for them. The cost of fuel is pretty cheap and at the moment there isn't a better option out there than the internal combustion engine."

Transport accounts for about a quarter of all US planet-warming emissions but also poses a direct health threat to about 45 million Americans who live, work or attend school within 300ft of roads that are shrouded in high air pollution levels.

This pollution can stunt lung growth, trigger asthma attacks, exacerbate heart disease and cause developmental problems. The EPA estimates 17,000 schools across the US are located next to roads with heavy traffic, with children from low-income and minority groups disproportionately put at risk. California is the only state in the US to ban the construction of a school on the cheap land found beside major highways.

US cities haven't emulated the likes of London and Stockholm by charging drivers a congestion fee to coax them on to public transport, cycling or walking; nor does the US feature the comparatively high rates of fuel tax seen in Europe. France's move to ban sales of petrol and diesel cars by 2040 would be politically unthinkable in the States.

But the air is much cleaner in American cities than it was in the 1970s, and a world away from the fug that now envelops Beijing and Delhi, in part due to vehicle emissions standards that have progressively been ratcheted up by the EPA.

That trajectory has been cast in doubt by the Trump presidency. In March, the EPA scrapped a deal struck between Barack Obama's administration and automakers that would require new cars to run 54.4 miles per gallon of fuel, up from 27.5 miles per gallon, by 2025.

The White House said the new rules had been "shoved down the throats" of car makers, with the main industry lobby group pointing out that consumers overwhelmingly prioritize safety, driving performance and value for money over fuel efficiency. There are more than 70 car models on sale that achieve 40 miles per gallon and they account for just 1% of total new vehicle sales.

Then, last month, the EPA cited "regulatory overreach" by the previous administration for its decision to waive clean truck standards that would have phased out "glider" vehicles that produce 55 times more diesel soot than new trucks. Scott Pruitt, administrator of the EPA, said his predecessors had "attempted to bend the rule of law and expand the reach of the federal government in a way that threatened to put an entire industry of specialized truck manufacturers out of business".

These rollbacks from the executive branch have dovetailed with an effort by Republicans in the Senate and the House to revamp fuel efficiency rules by replacing state and federal requirements with a single standard. Environmental groups and previous administration officials fear this will lead to a further weakening of emissions standards.

"America's clean car standards have dramatically improved the fuel efficiency of vehicles, saving consumers billions of dollars and cutting pollution in the process," said Carol Browner, a former administrator of the EPA.

"Instead of rolling back commonsense, successful and popular clean cars standards, we should focus on innovation and technology that will continue the auto industry's growth and the pollution reductions we've achieved since these standards were first established."

In the short term, this new approach risks a flashpoint between the federal government and California, which has a long-held waiver to enact vehicle pollution standards in excess of the national requirements. Twelve other states, including New York and Pennsylvania, follow California's standards, an alliance that covers more than 130 million residents and about a third of the US vehicle market.

Nichols said she had been disturbed by signals coming from Pruitt and other EPA officials that she said show the federal government is looking to end California's waiver.

"We are very concerned because these standards are the bedrock of our whole climate change platform," she said. "Scott Pruitt has made threatening noises about the Californian waiver, saying that we are trying to run the country. It feels like this is going to be the next shoe to drop. If

it does, we will litigate and fight for our rights in the political arena with other states and consumer advocates."

With federal regulation set to be pared back, technological advances in electric and gas-powered cars, as well as consumer preferences, are likely to play an increasingly important role in whether vehicle emissions are forced back down.

A flurry of recent optimistic studies have forecast that, by 2040, as much as 90% of all cars in the US will be electric. But the current conundrum is that petroleum-fueled vehicles are cheaper and seen as more reliable than their electric counterparts by most new buyers. Affordable gasoline is competing with electric recharging stations that are considered too sparse by many drivers to risk running out of puff, no matter the benefit to the environment.

"It's a challenging position for automotive companies because they are touting electric vehicles but ultimately they have to sell more cars," said Smith. "Consumers in the US aren't pushing for electric vehicles to the extent they are in Europe and unless we take a very different approach as a country, that doesn't look like it will change soon.

"You will need to see a major change in battery technology to make it viable. People are becoming more aware and concerned about global warming, but we aren't there yet. And when you look at the vehicles being put out by the major car companies, you could argue it's not an issue for them, either."

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Topics

- Greenhouse gas emissions
- US Environmental Protection Agency
- Pollution
- Climate change
- Automotive industry

- Trump administration
- news

Nickel, Henry [hnickel@hunton.com] From: 12/19/2017 7:04:34 PM Sent: To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]; Field, Andrea [afield@hunton.com] CC: Knauss, Chuck [CKnauss@hunton.com]; Brownell, Bill [bbrownell@hunton.com] Subject: RE: Short Notice I am too. See you then. Henry Nickel Special Counsel hnickel@hunton.com Ex. 6 Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 www.hunton.com ----Original Message----From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] Sent: Tuesday, December 19, 2017 2:03 PM To: Field, Andrea; Nickel, Henry Cc: Knauss, Chuck; Jaber, Makram Subject: RE: Short Notice Ex. 6 ----Original Message----From: Field, Andrea [mailto:afield@hunton.com] Sent: Tuesday, December 19, 2017 10:06 AM To: Nickel, Henry <hnickel@hunton.com> Cc: Wehrum, Bill <Wehrum.Bill@epa.gov>; Knauss, Chuck <CKnauss@hunton.com>; Jaber, Makram <mjaber@hunton.com> Subject: Re: Short Notice Ex. 6 > On Dec 19, 2017, at 9:20 AM, Nickel, Henry <hnickel@hunton.com> wrote: Sounds good. > > Henry Nickel > Special Counsel hnickel@hunton.com p 202.955.1561 > > Hunton & Williams LLP > 2200 Pennsylvania Avenue, NW > Washington, DC 20037 > www.hunton.com > ----Original Message----> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] > Sent: Tuesday, December 19, 2017 8:34 AM
> To: Nickel, Henry; Knauss, Chuck; Field, Andrea; Jaber, Makram > Subject: Short Notice > Ex. 6

> Bill Wehrum

- Assistant AdministratorOffice of Air and RadiationU.S. Environmental Protection Agency(202) 564-7404

Gill, Julia Zemnick [jgill@hunton.com] From:

11/20/2017 9:52:49 PM Sent:

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: RE: Reception

Ex. 6

----Original Message-----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Monday, November 20, 2017 4:44 PM To: Gill, Julia Zemnick

Subject: RE: Reception

Ex. 6

----Original Message---

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Monday, November 20, 2017 2:11 PM To: Wehrum, Bill <Wehrum.Bill@epa.gov>

Subject: RE: Reception

Hi Bill,

Ex. 6

----Original Message----From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Monday, November 20, 2017 1:53 PM To: Gill, Julia Zemnick

Subject: RE: Reception

Thanks Julia.

Ex. 6

----Original Message----

From: Gill, Julia Zemnick [mailto:jgill@hunton.com] Sent: Monday, November 20, 2017 12:03 PM

To: Wehrum, Bill <Wehrum.Bill@epa.gov>

Subject: RE: Reception

Hi Bill,

Thanks, Julia

----Original Message----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov] Sent: Wednesday, November 15, 2017 11:27 PM

To: Gill, Julia Zemnick Subject: Reception

Ex. 6

Sent from my iPhone

From: Nickel, Henry [hnickel@hunton.com]

Sent: 12/19/2017 2:20:59 PM

To: Knauss, Chuck [CKnauss@hunton.com]; Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

CC: Field, Andrea [afield@hunton.com]; Jaber, Makram [mjaber@hunton.com]

Subject: RE: Short Notice

Ex. 6

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 www.hunton.com

----Original Message----

From: Knauss, Chuck

Sent: Tuesday, December 19, 2017 9:13 AM

To: Wehrum, Bill

Cc: Nickel, Henry; Field, Andrea; Jaber, Makram

Subject: Re: Short Notice

Ex. 6

Sent from my iPhone

> On Dec 19, 2017, at 8:34 AM, Wehrum, Bill <Wehrum.Bill@epa.gov> wrote:

Ex. 6

> Bill Wehrum

- > Assistant Administrator
- > Office of Air and Radiation
- > U.S. Environmental Protection Agency
- > (202) 564-7404

From: Jaber, Makram [mjaber@hunton.com]

Sent: 12/19/2017 1:38:06 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]; Nickel, Henry

[hnickel@hunton.com]; Knauss, Chuck [CKnauss@hunton.com]; Field, Andrea [afield@hunton.com]

Subject: RE: Short Notice

Ex. 6

Enjoy! And Happy Holidays.

Makram

----Original Message----

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Tuesday, December 19, 2017 8:34 AM

To: Nickel, Henry; Knauss, Chuck; Field, Andrea; Jaber, Makram

Subject: Short Notice

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 11/15/2017 1:36:04 AM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

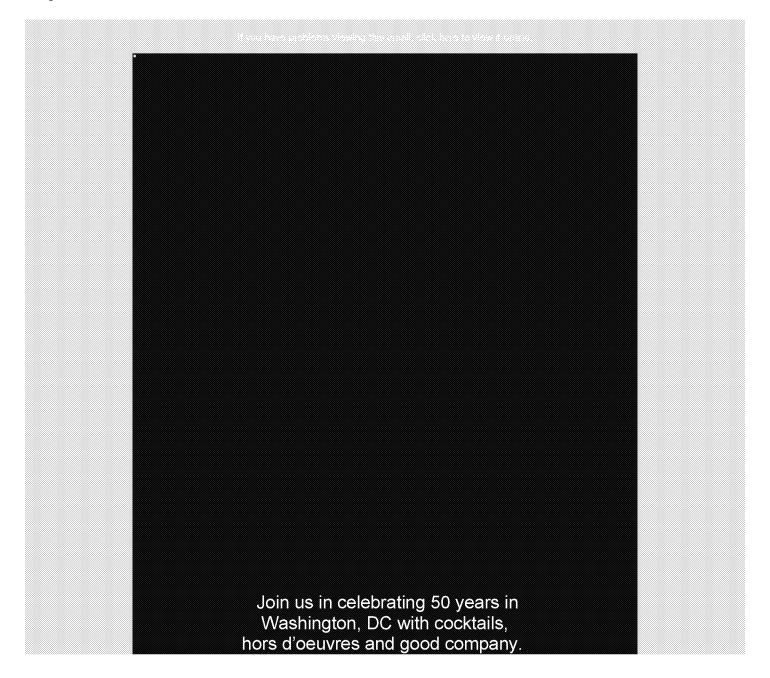
Subject: FW: You're Invited: Cheers to 50 Years!

Bill,

Attached is the invitation in case you need it.

From: Hunton & Williams LLP Insights **Sent:** Tuesday, October 10, 2017 4:36 PM **To:** Hunton & Williams LLP Insights

Subject: You're Invited: Cheers to 50 Years!



Wednesday, November 15, 2017 6:00 - 8:00 pm Hunton & Williams LLP 2200 Pennsylvania Avenue NW Washington, DC 20037 **RSVP** Add event to my calendar RSVP by: November 10th Atlanta | Austin | Bangkok | Beijing | Brussels | Charlotte | Dallas | Houston | London | Los Angeles (Miami | New York | Nortolk | Rateigh | Richmond | San Francisco | Tokyo | Tysons | Washington © 2017 Hunton & Williams LLP. If you have received this email in error, or if you would no longer like to receive electronic advisories from the sender, please reply using the "opt out" link below. ATTORNEY ADVERTISING MATERIALS. These materials have been prepared for informational purposes only and are not legal advice. This information is not intended to create an attorney-client or similar relationship. Please do not send us confidential

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Update your preferences (Subscribe to our mailing lists)

To unsubscribe, please reply to this email with "Unsubscribe" in the subject line.

From: Gill, Julia Zemnick [jgill@hunton.com]

Sent: 11/28/2017 5:51:30 PM

To: Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Mandy's availability on Thursday - move time slots?

Hi Bill,

I'm sorry to ask you this, but do you think there's any chance that Mandy can move to a later time slot for our event on Thursday? We've run into a ton of scheduling conflicts. Can she do the 2:30-3:15 panel? I'm happy to reach out to her directly, but don't have her contact information.

Thanks so much for your help.

Julia



Julia Zemnick Gill, MBA

Senior ALG Team Manager igill@hunten.com

Ex. 6

www.huntonnickeireportblog.com

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

hunton.com

From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 7/21/2018 2:18:37 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: A Moving Story

Forgive me for getting a little sentimental – recall that I cry every time in the "turning in the jerseys" scene in *Rudy* - but I was touched by what this young man did.

I hope you enjoy.

Mike

http://www.foxnews.com/opinion/2018/07/21/what-walter-carr-young-man-who-walked-20-miles-to-work-taught-me-this-week.html



Michael Kerrigan

Partner

mkerrigan@HuntonAK.com

Ex. 6 j bio vCard

Hunton Andrews Kurth LLP Bank of America Plaza, Suite 3500 101 S. Tryon Street Charlotte, NC 28280

HuntonAK.com

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From: Kerrigan, Mike [mkerrigan@hunton.com]

Sent: 12/15/2017 1:15:01 PM

To: Kerrigan, Mike [mkerrigan@hunton.com]

Subject: Charlie Brown Tree

Seemed only right to show the Old Man's softer side after tales of backyard beat-downs. Enjoy.

Mike

https://www.wsj.com/articles/youre-a-good-plant-charlie-brown-1513293857



Michael Kerrigan

Partner

mkerngan@hunton.com _______Ex.6_____]

bio | vCard

Hunton & Williams LLP Bank of America Plaza, St 3500 101 South Tryon St Charlotte, North Carolina 28280 www.hunton.com

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From: Prabhu Dayal [pdayal@euec.com]

Sent: 12/14/2017 9:23:16 PM

To: Pruitt, Scott [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=757bedfd70ca4219b6d8046f5ce5681e-Pruitt, Sco]

CC: Drinkard, Andrea [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=808a6b7b65bf447f93dad2f510feaf61-ADRINKAR]; Wehrum, Bill

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil];

wwehrum@hunton.com; EUEC Info [info@euec.com]

Subject: Invite EPA Administrator. Scott Pruitt as Keynote Speaker at USA's Largest Energy Utility Environment Conference -

EUEC 2018: March 5, San Diego, California.

Attachments: 2018EUEC-Brochure.pdf

Hon. Scott Pruitt Administrator, U.S. EPA Washington, DC 20004

Dear Administrator Pruitt,

It is an honor and privilege to invite you to be our keynote speaker at EUEC 2018 - the 21st annual event, USA's largest Energy Utility Environment Conference to be held March 5 to 7, 2018 in San Diego, CA, with 2,000 delegates, 400 speakers, and 200 exhibits.

For the last 10 years, we have been fortunate to have with heads of EPA, DOE, and the CEO of a major Coal Electric Utility, and an NGO speak in the keynote session of EUEC, as shown listed below.

- US EPA Administrator or AA (Gina McCarthy, Janet McCabe)
- US DOE the Assistant or Deputy Secretary (Chris Smith, David Mohler)
- CEO of major coal fired electric utility, (Southern, Duke, AEP, Ameren, PNM, Allete, TEP, APS, SRP)
- Head of a NGO (CDP, NRDC, EDF)

I am copying Mr. Bill Wehrum, AA, US EPA Office of Air & Radiation, and his assistant, who have participated in the past and familiar with EUEC to help coordinate.

We plan to make your presentation most valuable and rewarding to the US EPA, and the 2,000 energy and utility professionals attending EUEC, and an additional 3,000 attending the Clean Car Expo promoting alternate fuel vehicles.

With best regards, Prabhu Dayal, PhD, P.E. Chairman, EUEC info@euec.com

Phone Ex. 6

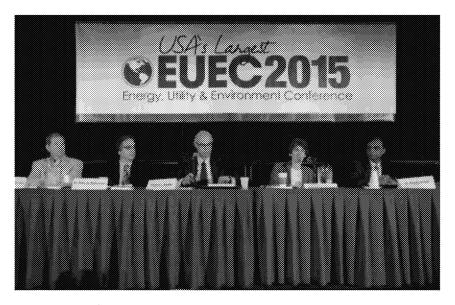
21st Annual EUEC Conference Co-located with Clean Car Expo







HOME REGISTER PROGRAM EXHIBIT SPEAK HOTELS SPONSOR ABOUT US



ELEC2015 Keynote Speakers from left to right; Len Hering, RADM, USN(Ret.); Dr. Barry Walterstein, Executive Officer, South Coast Air Quality Management District; Waren L. Baxter, Chairman, President and CEO, American Corporation; James McCabe, Acting Assistant Secretary, US EPA; Dr. Probho Dayai, EUEC Chair



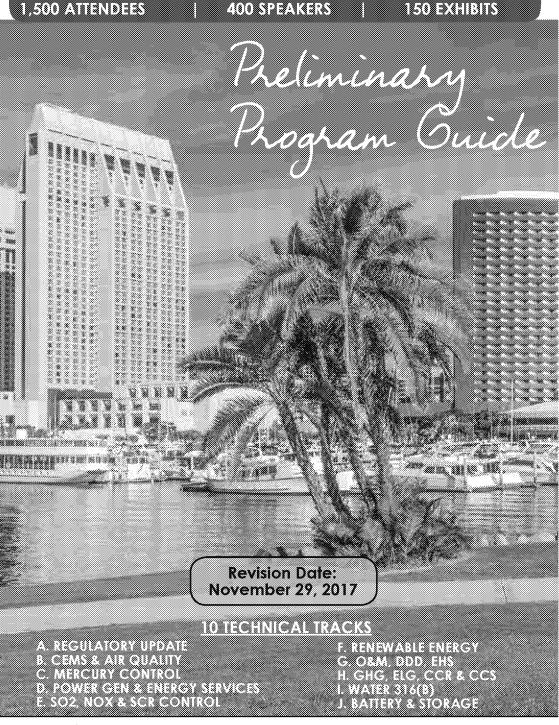
EUEC2014 Keynote Speakers from left to right: Dr. Prabhu Dayst, EUEC Chair; Janet McCabe, Acting Assistant Secretary, US EPA; Alan Hodnik, Chairman, President & CEO, Atlete; Hon. Chris Smith, Assistant Secretary, US DOE; Phil Sharp, President, Resources for the Future; Dr. Bryan Hannegan, Associate Lab Director, NREL



21st Annual Conference & Expo

Monday March 5 to Wednesday March 7, 2018

San Diego Convention Center 111 W Harbor Dr., San Diego, CA 92101



Keynote Panelists:











Lance Pierce

Probhu Davai

What is EVEC!

EUEC 2018: The 21st Annual Energy, Utility & Environment Conference, is USA's largest professional networking & educational event of its kind, held March 5 to 7, 2018, at the San Diego Convention Center, San Diego, CA. This Program Agenda lists the papers received to-date for EUEC 2018.

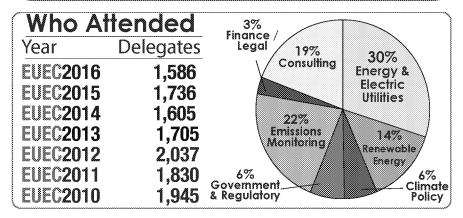
CALL FOR PAPERS

- EUEC 2018 is now accepting abstracts, to speak and make a 20-minute PowerPoint presentation, in any of the 10 tracks.
- If you wish to serve on the Advisory Board, Chair or Sponsor a Session, please check the box, or comment in the Submit Abstract form.

Submit abstracts on-line by December 15th at http://www.euec.com/submit-abstract/

SPEAKER FORMAT

- All speakers limited to 20 minutes using PowerPoint
- Submit abstract online and select track and session of choice
- Each session is 2 hours long with 6 speakers and 2 co-chairs



CHAIR SPONSOR ADVISORY BOARD

Chairs/Sponsors/Advisory Board are responsible for:

- overall design of program agenda & session topics,
- invite, select and place speakers and design session,
- review abstracts for duplication and QC,
- moderate the session, and ensure speakers are timely.

CONTACT: info@euec.com

MISSION STATEMENT

EUEC facilitates information exchange and cooperation between the utility industry, government, and regulators for the protection of our environment and energy security.

TRACK A ADVISORY BOARD





















In the 21 year history of EUEC, this track is one of the most popular, with capacity attendance. Presentations are made by leaders and experts on current regulations that impact the electric utility industry. Updates on upcoming regulations, and discussions from regulatory and industry perspectives. Practical examples and case histories provide senior utility executives and decision makers options and strategies for compliance.

Monday | IPM - 3 PM



A1. REGULATORY UPDATE - AIR

A1.1 ENERGY INDUSTRY REGULATIONS, 2017-2020 (INVITED) Co-Chair - John Kinsman, Sr. Director - Enviroment, Edison Electric Institute



A1.2 RECONSIDERING EPA RECONSIDERATIONS Session Sponsor & Co-Chair - Jay Holloway, Partner, Williams Mullen



A 1.3 FURTHER TRIALS AND TRIBULATIONS OF THE GUIDELINE ON AIR QUALITY MODELS Gale Hoffnagle, Sr. Vice President & Technical Director, TRC Environmental Corporation



A 1.4 EPA'S REGULATORY AGENDA UNDER THE TRUMP ADMINISTRATION David Jordan, Partner, ERM



A 1.5 ZERO EMISSIONS CREDITS - ADDRESSING NUCLEAR GENERATION-AT-RISK THROUGH Kenneth Dubin, Senior Electric Analyst, U.S. Energy Information Administration (EIA)



A1.6 THE CURIOUS CASE OF CAA CIVIL PENALTY INFLATION Kurt Kissling, Attorney, Pepper Hamilton LLP

Monday | S.SOPM - 5.SOPM

A2. ELECTRIC UTILITY CHALLENGES

PERKINSCOIE A2.1 CLEAN AIR ACT INITIATIVES IN THE TRUMP ERA: WHAT TO EXPECT Alexandra Bromer, Partner, Perkins Coie LLP



A2.2 ENERGY & AIR QUALITY REGULATION UNDER THE TRUMP ADMINISTRATION Scott Osbourn, Principal, Trinity Consultants



A2.3 AIR REGULATORY CHALLENGES FACING THE NATION'S ELECTRIC COOPERATIVES Daniel Chartier, Regulatory Director, Environ. Policy, Nat'l Rural Electric Coop. Assoc.

ss Brattlesson

A2.4 POLICY SHIFTS AND MARKET DIRECTIONS Marc Chupka, Principal, The Brattle Group

epe:

A2.5 DEVELOPING A FRAMEWORK ON INTEGRATED ENERGY NETWORK PLANNING Adam Diamant, Technical Executive, EPRI; Tom Wilson and Daniel Brooks



SPEAKING SLOTS AVAILABLE

TRACK | A | REGULATORY UPDATE ROJOM

Tuesday 7.30AM 9.30AM



A3. NAAQS, SSM & CAA

A3.1 2015 OZONE NAAQS AREA DESIGNATIONS - WHO'S AT RISK? (INVITED) Mike Knechtel, Air Permitting Section Leader, Black & Veatch



A3.2 MODELING APPROACHES FOR STARTUP, SHUTDOWN AND MALFUNCTION EVENTS Robert Paine, Associate Vice President, AECOM; Chris Warren



A3.3 PHOTOCHEMICAL MODELING W/ CAMX FOR OZONE INTER-PRECURSOR TRADING Qi Zhang, Sr. Air Quality Engineer, Providence Eng. & Env. Group; James Red



A3.4 TAKING THE CAA INTO THE 21ST CENTURY AND BEYOND: A PROPOSAL Bill Smalling, Attorney, The Law Office of C. William Smalling, PC



A3.5 OZONE AND PM2.5 - SIL'S, MERPS, AND MORE Richard Hamel, Senior Air Quality Meteorologist, ERM

Tuesday CAM 2PM



A4. NSR

A4.1 NSR 2018 - UPDATE AND RECENT DEVELOPMENTS

Co-Chair - David Jordan, Partner, ERM



A4.2 THE UTILITY NEW SOURCE REVIEW ENFORCEMENT INITIATIVE—ONE LAST UPDATE? Makram Jaber, Partner, Hunton & Williams LLP

Joseph Hous & Jos. nc.

A4.3 DECONSTRUCTING NSR ENFORCEMENT: MINIMIZING PLANT EXPOSURE Eric Hiser, Partner, Jorden Hiser & Jov. PLC



A4.4 PSD PERMITTING UNDER THE 2017 GUIDELINE ON AIR QUALITY MODELS J. Stephen Beene, Sr. Consultant, Trinity Consultants; N. Sule & C. Otto Chambers



A4.5 IS NSR REFORM POSSIBLE? SETTLEMENT TRENDS AND YOUR REAL NSR RISK Liz Williamson, Attorney, Williams Mullen

LATHAM WATKINS ... A4.6 THE FUTURE OF NEW SOURCE REVIEW - OPTIONS AND PROSPECTS FOR REFORM Joel Beauvais, Partner, Latham & Watkins

Tuesday 100PM - 300PM

A5. UTILITY IMPACTS



A5.1 TURNING THE BATTLESHIP: HOW THE TRUMP EPA IS CHARTING A NEW COURSE Session Sponsor & Co-Chair - Mack McGuffey, Partner, Troutman Sanders LLP



A5.2 MERCURY & AIR TOXICS STANDARDS: REGULATORY & LITIGATION UPDATE (INVITED) Angela Levin, Partner, Troutman Sanders LLP



A5.3 IS FEDERALISM ALIVE UNDER THE CLEAN AIR ACT (REDUX)? (INVITED) William Wehrum, Partner, Hunton & William



A5.4 CORONADO GENERATING STATION REGIONAL HAZE BART ALTERNATIVE Bill McClellan, Manager, Air Quality Services, Salt River Project

PMM/Discourses

A5.5 BACK TO BASIC ON COMPLIANCE Claudette Horn, Sr. Manager, Environmental Services, PNM Resources



SPEAKING SLOTS AVAILABLE

TRACK | A | REGULATORY UPDATE

Tuesday | 3.30PM - 5.30PM

A6. PERMITS & COMPLIANCE

A6.1 (INVITED) Ncel Energy

Nicholas Martin, Environmental Policy Manager, Xcel Energy; Lauren Quillian

BAKER BOTTS ...

A6.2 THE PIECEMEAL APPROACH TO THE CLIMATE REGULATION PUZZLE Megan Berge, Partner, Baker Botts LLP

A6.3 STRATEGIC ANALYSIS OF GHG PROGRAMS: MITIGATION AND ADAPTATION Jesse Frederick, Vice President, WZI, Inc.

виямя Дмеромияси.

A6.4 CHALLENGES WITH PERMITTING FOR INCREASED CAPACITY Mary Hauner-Davis, Manager, Air/Noise Department, Burns & McDonnell Engineering



A6.5 CHALLENGES OF PERMITTING COMBINED CYCLE COMBUSTION TURBINES J. Dwain Kincaid, Senior Consultant, Air Quality Services, LLC

Wednesday 7.30AM 9.30AM



A7. AIR PROGRAMS & PERMITTING

A7.1 OVERVIEW AND UPDATE OF INTERSTATE TRANSPORT ISSUES (INVITED) Riaz Mohammed, Manager, EEI



A7.2 SCE SANTA BARBARA EM. GENERATOR PROJECT - PART 1: SITING & PERMITTING Michelle Nuttall, Sr. Project Manager, Southern California Edison; Sara Head, Yorke Eng.



A7.3 SCE SANTA BARBARA EMERGENCY GENERATOR PROECT - PART 2: PROPOSITION 65 Sara Head, Principal Scientist, Yorke Engineering; Michelle Nuttall, Southern Cali. Edison



A7.4 PERMITTING CHALLENGES FOR RICE GENERATION TO SUPPLEMENT RENEWABLE **ENERGY SOURCES**

Mary Kaplan, Air Quality Meteorologist, AECOM



SPEAKING SLOTS AVAILABLE

Weshieropy IOAN 12FA

A8. REGULATORY UPDATES



A8.1 NSR OFFSETS FOR NEW POWER PROJECTS IN SOUTH COAST; COST AND AVAILABILITY Bhaskar Chandan, AQ Analysis and Comp. Supervisor, South Coast Air Quality Mamt



A8.2 GAS TURBINE REGULATORY REGULATIONS AND ENFORCEMENT CASE STUDIES Ben Sehgal, Senior Staff Engineer, California Air Resources Board



SPEAKING SLOTS AVAILABLE

TRACK | B | CEMS & AIR QUALITY

TRACKBADV SORYBOARD

















An excellent "must attend" training session for experts and operators at CEMs. This Track includes EPA policy and procedures for accurate monitoring, reporting, and auditing of emissions pursuant to Part 75 of the Acid Rain Program and the Clean Air Interstate Rule. Presentations on how to submit monitoring plans, QA/QC tests, and emissions data using the Emissions Collection and Monitoring Plan System (ECMPS).

Other expert presentations and programs include MATS, egrid, RATA, Appendix D & E. Electronic Monitoring data, QA/QC program for Cylinder gases, AQ and fenceline monitoring, and modeling.

Manday IPM 3 PM

CEMS & PEMS



81.1 T8A

Gary Cacciatore, Business Development Manager, Cemtek Environmental



B1.2 PEMS DEPLOYMENT IN SAUDI ARABIA

Solutions: Brian Swanson, President, CMC Solutions; Jessica Palmer



81.3 LASER DISPERSION SPECTROSCOPY FOR REMOTE SENSING

MIRICO Mohammed Belal, Business Development Director, MIRICO; Damien Weidmann, Arun Kannath, Johnny Chu



81.4 PEMS SYSTEM EVOLUTION TO MEET CHANGING POWER PLANT CONDITIONS Brian Swanson, President, CMC Solutions



John Kelley, Vice President of Business Development, AMP-Cherokee

MIRICO B1.6 LASER DISPERSION SPECTROSCOPY AND CEM APPLICATIONS
Graham Leggett, Vice President, Product Management, MIRICO Ltd.

Manday | GSOPM = 5 SOPM

B2. CEMS & TESTING



B2.1 SUCCESSFUL TESTING MANAGEMENT FOR CEMS RATA, PERMIT LIMITS, MACT COMPLIANCE, AND EQUIPMENT CONTRACTS Brian Petermann, POWER Engineers, Inc.



82.2 MEETING DEMAND WHILE COMPLYING WITH STARTUP AND SHUTDOWN EMISSIONS Brian Fowler, Director of Implementation & Marketing, Environmental Systems Corp (ESC)



B2.3 NH3 SLIP BY EXTRACTIVE METHODS Matt Swanson, Vice President, Sales, CAI, Inc.



82.4 STRATIFICATION TESTING - WHEN IS IT REQUIRED? Dan Todd, President, Air Quality Services, LLC; Paul Siegel and Chris Wehner

82.5 NEXT-GEN CRDS ANALYZERS FOR MONITORING AMMONIA SLIP IN SCR PROCESSES Jeremiah Riddle, President, Tiger Optics

> SUBMIT SPEAKING SLOTS AVAILABLE ABSTRACT

> > O WEUECZIN

5

TRACK | B | CEMS & AIR QUALITY

Tuesday 7.30AM 9.30AM



B3. DUST EMISSIONS & PM

B3.2 MONITORING LOW LEVEL DUST EMISSIONS & DETECTION OF ABATEMENT FAILURE Dave Gager, Regional Manager, Altech Environment USA

83.3 DUST EMISSION AND EFFECT OF PM10 & PM2.5 IN URBAN INFRASTRUCTURE Afrim Syla, Air Quality Specialist, University of Prishtina - Kosovo



SPEAKING SLOTS AVAILABLE

Tuesday | TOAM - 12PM



B4. PM. CEMS. ESP

B4.1 COROMAX FOR POWER PLANTS





84.2 THE EFFECT OF 3-PHASE POWER SUPPLY AND SMART CONTROLLER ON ESP Reza Sharafy, Product Manager, KraftPowercon Sweden AB

84.3 MORE CASE STUDIES OF THREE PHASE POWER SUPPLIES IMPROVING ESP PERFORMA John Knapik, ESP Solutions Consultant, Babcock and Wilcox



Mark de Garbolewski, Market Specialist, W.L. Gore and Associates



SPEAKING SLOTS AVAILABLE

Tuesday | 100PM - 3:00PM

B5. AIR QUALITY MODELING



B5.1 CHARACTERIZING PARTICULATE EMISSIONS FROM EVAPORATION POND MISTERS Mannie Carpenter, Sr. Engineer, Stantec Consulting Svcs; Amber Summer, Kathy Houed



B5.2 BACKGROUND VS. NEARBY SOURCES - TESTING EPA'S NEW GUIDANCE Co-Chair - George Schewe, Principal Meteorologist, Trinity Consultants; Brian Otten



85.3 NOX TO NO2 CONVERSION METHODS IN CALPUFF DISPERSION MODE Tina Liu, Atmospherics Specialist, Advisian



85.4 AIR QUALITY FORECASTING AND MGMT USING MACHINE LEARING AND IOT Neil Gerber, Director, New Energy & Environment, IBM



B5.5 SOLUTIONS TO NEW U.S. EPA MODELING REGULATIONS Christopher Occhipinti, Project Professional, NTH Consultants, Ltd.



SPEAKING SLOTS AVAILABLE

TRACK | B | CEMS & AIR QUALITY

Tuesday | 3.30PM - 5.30PM

B6. MEASUREMENT TECHNOLOGIES



86.1 IMPROVED MEASUREMENT OF LOW PARTICULATE EMISSIONS FROM GAS TURBINES Kevin Crosby, V.P., Technical, Montrose Air Quality Svcs; Glenn England, Ramboll-Environ



B6.2 SOLVING COMPLIANCE ISSUES USING FTIR MULTIGAS MEASUREMENT TECHNOLOGY Jim Cornish, Sales and Support Manager, Gasmet Technologies



86.3 UNDER-REPORTING OF NOX BY AS MUCH AS 80%, WITH REGULATORY APPROVAL Robert Mullowney, President, MonitorTech Group



IfinityA 86.4 CONTINUOUS EMISSION MONITORING SYSTEM(CEMS) PROGRAM BEST PRACTICES Consultants Eric Wiley, Managing Consultant, Trinity Consultants

Wednesday 730AM - 930AM

B7. ADVANCED TECHNOLOGIES



B7.1 M&C ANNOUNCES NEW LASER MEASUREMENT TECHNOLOGY Bernadette Shahin, National Applications Manager, M&C TechGroup North America



87.2 AGING TRISETS ON ELECTROSTATIC PRECIPITATORS - THE HIDDEN LIABILITY Paul Leanza, Business Development Manager, KraftPowercon



87.3 T8A

Bruce Herman, ABB Process Analytics



87.4 DSI SAVINGS THROUGH REAL TIME SO3/H2SOV MEASUREMENT Dan Kietzer, National Product Manager, SICK, Inc.



SPEAKING SLOTS AVAILABLE

B8. FENCELINE MONITORING & AQ

Wednesday DAM 2PM

∵ atmosfir

88.1 THE D-FENCELINE MEASUREMENT SYSTEM - ADVANCED REMOTE SENSING SOLUTION Gilad Shpitzer, CEO, Co-Founder, Atmosfir Optics; Dr. Robert Kagann, Dr. Yael Etzioni



88.2 OPTICAL REMOTE SENSING FOR FENCE-LINE MONITORING USING QCL Peter Zemek, SVP - Emerging Tech., Montrose Env. Grp; Daniel Cavicchio, Jr., Block Eng.



B8.3 COMMUNITY-BASED AIR TOXICS FENCELINE MONITORING AND INITIATIVES (Onsultains) Steve Walters, Principal Consultant, Trinity Consultants



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7

ADVISORY BOARD

























This Track provides current presentations on Advanced Mercury Control technologies and strategies, for compliance with MATS emission limits including Hg, DSI, MATS, ACI, & Amended Silicates.

Monday IPM - SPM

C1. HG MATS COMPLIANCE



C1.1 LOWERING MERCURY COMPLIANCE COSTS THROUGH OPTIMIZATION
Richard MacPherson, President/CEO, ME2C; John Pavlish, Nicholas Lentz, Marcus
Sylvester, James Trettell



C1.2 COST SAVINGS ASSOCIATED W/ MATS COMPLIANCE OPERATING AS LOW EMITTING Brandon Kibler, Project Manager, Novinda Holdings, Inc.; Jeremy Hayes, Black Hills Energy; Clifton Brown and James Butz, Novinda Holdings, Inc.



C1.3 A SORBENT INJECTION TECHNOLOGY UPDATE

Mitch Lund, Product Manager - Air Pollution Control, Nol-Tec Systems



C1.4 HOW THE RIGHT OPTIMIZATION TEAM CAN IMPROVE YOUR MATS COMPLIANCE Regina Rodriguez, Chief Operating Officer, Carbonxt; Christine Valcarce, Lindsey Costin, David Mazyck



C1.5 OPTIMIZING ACI COST-PERFORMANCE WITH ADVANCED PAC PRODUCTS
Martin O'Brien, Applications Engineer, Calgon Carbon; Richard Mimna, Jenalle Brewer
and Michael Pealer



C1.6 EFFECTIVENESS OF MERCURY CONTROL STRATEGIES: A SURVEY OF MATS IMPLEMENT. Connie Senior, VP of Technology, ADA-ES, Inc.; Sharon Sjostrom

Menday | 3.30PM | 5.30PM

C2. ACTIVATED CARBON



C2.1 KINETIC CHEMISTRY MODEL FOR MERCURY REMOVAL BY ACI Guisu Liu, Founder, Reaction Analytics Solutions Corp.



C2.2 HG BEHAVIOR IN HYBRID FILTER WITH INJECTION AND COATING OF AC IN CPP Jin-Ho Sung, Researcher, Yonsei University; Yong-Chil SEO, Se-Won Park, Ha-Na Jang \$ Seung-Ki Back



C2.3 FUTURE OF THE ACTIVATED CARBON INDUSTRY David Mazyck, Chief Executive Officer, Carbonxt



C2.4 TBD (INVITED)
Michael Pealer, Calgon Carbon



SPEAKING SLOTS AVAILABLE

TRACK | C | MERCURY CONTROL

C3. HG CONTROL TECHNOLOGIES



C3.1 AS-ULTRA PERFORMANCE IN THE MOST CHALLENGING CONFIGURATIONS Thomas Gale, Director of Technology Development, Novinda Holdings, Inc.



C3.2 CIRCULATING DRY SCRUBBER MERCURY CONTROL PRB COAL-FIRED POWER PLANTS Terence Ake, Principal Engineer, Babcock Power, Inc.; Roderick Beittel



C3.3 INNOVATIVE SORBENT TRAP MEASUREMENT TECHNIQUES: HG, SO3, NH3, HCL, SE Alexandra Sipershteyn, Product Manager, Ohio Lumex



C3.4 TBD (INVITED)
Calgon Carbon



SPEAKING SLOTS AVAILABLE

Tuesday | IDAM - I2PM

C4. DSI & ACI



C4.1 EXPERIENCE WITH RETROFITING HYDRATED LIME INJECTION SYSTEMS

Jon Norman, Manager - Sales and Technology, United Conveyor Corporation



C4.2 LANCE-LESS DSI TECH ALLOWS CONT. OPERATION OF EXISTING ESPS Bob Mastropietro, Technical Sales Engineer, Nol-Tec Systems



C4.3 EFFECTIVE AND SIMPLE MERCURY CONTROL IN PLANTS CONFIGURED WITH WET FGD Thomas Gale, Director of Technology Development, Novinda Holdings, Inc.



C4.4 USE CHEMISTRY-BASED CFD TO INVESTIGATE DSI OPTIMIZATION OPTIONSGuisu Lu, Founder, Reaction Analytics Solutions Corp



C4.5 STRATEGIC USE OF TEMPORARY INJECTION SYSTEMS (PAC AND DSI)
Mike Gregory, Business Development - Capital Equipment, IAC



C4.6 SODIUM SORBENTS FOR HIGHER EFFICIENCY
Sponsor & Co-Chair - Michael Atwell, Manager, Solvay Chemicals; Comelia Cretiu

Tuesday | 1.00PM - 3:00PM

6\$5

C5. HG CONTROL & OPTIMIZATION

C5.2 DEMONSTRATION-HIGH DSI COMPATIBILITY - COMMERCIALLY AVAIL.ACI (INVITED)

John Satterfield, Sr. Field Service Engineer, Cabot Norit Activated Carbon



C5.3 SUSTAINABLE PROCESS FOR POLYPROPYLENE PRODUCTION: A CFD STUDY

Naser Jamshidi, Crisis Management & Passive Defense Manager, National Petrochemical

Co.; Reza Marandi



SPEAKING SLOTS AVAILABLE

TRACK | C | MERCURY CONTROL

Tuesday SiSOPM - 5 SOPM

C6. YOUNG POWER PROFESSIONAL (2017)

Gulenyii

C6.1 GROWING YOUR CAREER: ADVICE FOR THE YOUNG POWER PROFESSIONAL Co-Chair - Priscilla Kissinger, Special Projects Manager, Carbonxt

OTE Energy

C6.2 INTEGRATING YOUNG PROFESSIONALS & NEW EMPLOYEES: A UTILITY'S PERSPECTIVE Tom Durham, Manager of Environmental Field Services, DTE ENergy

UNITED CONVEYOR

C6.3 YOUNG PROFESSIONAL PROGRAMS IN ACTION
Conner Cox, Strategic Project Mnager, United Conveyor Corporation

C4.5 COMPANY INTERNSHIPS CREATE SUCCESSFUL NEW HIRES

Jessica Keller, Environmental Analyst, Xcel Energy



C6.4 A UTILITY SUCCESSFULLY ENSURES NEW HIRES & YOUNG PROFESSIONALS THRIVE Philip Imber, Manager Air Section, Environmental Affairs, LG&E



C6.6 MENTORSHIP & PROFESSIONAL GROWTH: HELPING EMPLOYEES STEADILY PROGRESS Todd Svoboda, Environmental Compliance, East Kentucky Power Cooperative



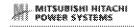
C6.7 LEVERAGING INDUSTRY RELATIONSHIPS TO INCREASE CUSTOMER SUCCESS Ann Arney, Utility Services, ICS Consulting; Michael Piper

TRACK | D | POWER GEN & ENERGY SERVICES

ADVIORY BOARD FOR TRACK D



















This Track includes Mitsubishi Power sponsored exhibits & presentations on Advanced Gas Turbine technologies and emission controls for:

- Power plant conversions from coal to natural gas,
- GT Technologies adapting to CNG, LNG and fracturing industry,
- GT Adaptations and strategies for west coast utilities, (CA, AZ, NV, etc)
- Gas Turbines Technologies for Renewable Energy Industry
- Transmission & Distribution; Demand and Rates
- Energy Policy, Security, & Rates

Monday | IPM - 3 PM

D1. ADVANCED GAS TURBINE TECHNOLOGIES

MITSUBISM MTACHI POWER SYSTEMS D1.1 NEW ULTRA-LOW NOX BURNER CAN SAVE MILLIONS ON O&M & CAPITAL COSTS

Joe Brown, AMS Product Manager, Mitsubishi Hitachi Power Systems America



D1.2 GAS TURBINES & INDUSTRIAL SCR SYSTEMS (INVITED)

Co-Chair - Robert McGinty, Sr. Product Manager, Mitsubishi Hitachi Power Systems



D1.3 ELECTRICAL ENERGY MGMT IN HOUSEHOLD REFERIGERATORS AND FREEZERS
Seved Moitaba Sadrameli, Professor, Tarbiat Modares Univ., L. Abdollmaleki, A. Pirvaram



D1.47 TRAITS OF HIGHLY EFFECTIVE ENERGY EFFICIENCY PROJECTS
Ricson Chude, Project Manager, Southern California Edison



SPEAKING SLOTS AVAILABLE

Monday BOOPM 5 SOPM

) Pitto Analysici

D2. POWER PLANT CONVERSION TECHNOLOGIES

D2.1 THE CARBON CHALLENGE FOR THE POWER INDUSTRYBruce Rising, Executive Advisor, ADI Analytics, LLC



D2.2 THE IMPORTANCE OF POWER PLANT PERFORMANCE TESTS
William Stark, Vice President, Environmental Services, Leidos; Michael Giampetro



D2.3 IOT WILL NOT DELIVER ITS POTENTIAL - UNLESS IT SOLVES THIS CHALLENGE Harry Sim, CEO, Cypress Envirosystems



D2.4 COAL TO GAS CONVERSION ADVANTAGES: CASE STUDY Joe Brown, Head of Aftermarket Sales, MHPS



SPEAKING SLOTS AVAILABLE

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TRACK | D | POWER GEN & ENERGY SERVICES

Tuesday 7.30AM - 7.30AM

Total Protection

D3. ENERGY AND CYBER SECURITY

D3.1 WHAT THE WORLD MUST KNOW URGENTLY ABOUT NUCLEAR SECURITY Phrantceena Thate-Halres, CEO, Total Protections USA LLC



D3.2 SAFETY IN THE ELECTRICITY AND PETROLEUM INDUSTRIES Fred Mayes, Senior Energy Analyst, U.S. Energy Information Administration



SPEAKING SLOTS AVAILABLE

Tuesday IDAM - 12PM

D4. DISTRIBUTED GENERATION, T&D

SIEMENS D4.1 GAS FUEL FLEXIBILITY FOR GAS TURBINE DISTRIBUTED POWER GENERATION

Michael Welch, Industry Marketing Manager, Siements Industrial Turbomachinery Ltd.



D4.2 PUTURE "ENERGY" UTILITY: DEEP DECARBONIZATION OF ENTIRE ENERGY ECONO Bill Leighty, Founder, The Leighty Foundation



D4.3 WIRELESS POWER TRANSFER SMALL-SCALE PROTOTYPE

Adel El-Shahat, Assistant Professor, Georgia Southern University: Dylan Nelms



D4.4 PREDICTING AND DETECTING GAS TURBINE MALFUNCTIONS Patrick Bangert, CEO, Algorithmic Technologies, Inc.



TECHNOLOGIES

SEPSEAPHIE D4.5 INNOVATIVE AND INSPIRING GIS TECHNOLOGY FOR PUBLIC WORKS Matthew McLamb, Chief Technology Officer, Geographic Technologies Gorup, Inc.



Tuesday 1.00PM - 3.00PM

Epsilon

D5. ENERGY POLICY, DEMAND AND RATES

D5.1 A TALE OF TWO ISSUES

Stephen Slocomb, Principal, Epsilon Associates



D5.2 ENERGY ECONOMICS AND A SUSTAINABLE ELECTRICITY POLICY Daniel Mussatti, Senior Energy Economist, US NRC



D5.3 LATEST DEVELOPMENTS IN GRID MODERNIZATION Co-Chair - John Finnigan, Lead Counsel, Environmental Defense Fund



D5.4 ONE GOAL, MANY PATHS TO RESILIENCY Carmen Henrikson, Associate Vice President, TRC Energy Services



D5.5 CURRENT TRENDS AND DEVELOPMENTS FOR ELECTRIC UTILITY RATES Ted Kelly, Principal & Senior Project Manager, Burns & McDonnell

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TRACK | D | POWER GEN & ENERGY SERVICES

Tuesday 3 30PM 5 30PM

D6. BUILDING TECHNOLOGIES



D4.1 INNOVATION IN ENERGY EFFICIENCY PROGRAM DESIGN lan Metzger, Program Development Engineer, Lockheed Martin Energy



D6.2 LOWER GLOBAL WARMING POTENTIAL WITH CO2 HEAT PUMP WATER HEATERS Cheryn Metzger, Senior Research Engineer, Pacific Northwest National Laboratory



D6.3 ON THE ROAD TO ZNE - CITIES REACHING AHEAD Farhad Farahmand, Project Manager, TRC Energy Services



D4.4 INCENTIVISING HIGH-PERFORMANCE BUILDING-FINANCING Teresa Lopez, CEO, Green Energy Money, Inc.



D6.5 SMARTPNEUMATICS - MAKING DUMB BUILDINGS SMART Harry Sim, CEO, Cypress Envirosystems



D4.6 IMPROVING ENERGY STORAGE PERFORMANCE OF CONCRETE CONTAINING FORMS Seyed Mojtaba Sadrameli, Professor, Tarbiat Modares University; S. Hasanabadi

Wednesday 7 30AM - 7 30AM

D7. CHP



SIEMENS D7.1 COMBINED HEAT AND POWER SOLUTIONS FOR DISTRICT HEATING APPLICATIONS Dalia El Tawy, Director-Thermal Power Solutions, Siemens



D7.2 ENERGY & AIR POLLUTION REDUCTION FROM COGENERATION AT JOHNS HOPKINS John Kumm, Senior Engineer, EA Engineering, Science and Technology



D7.3 KILLING TWO BIRDS WITH ONE STONE: "SMART" COUPLING ENERGY-EFFICIENT CH Anthony Cirillo, Senior Project Director, AECOM - Power Division



D7.4 MEDIUM VOLTAGE AUXILIARY BOILERS AND FUEL GAS DEWPOINT HEATING SYSTEMS David Taylor, Director of Technical Sales, Chromalox



D7.5 POWER/WATER SOLUTIONS: USING THERMAL ENERGY FROM CHP PLANTS TO Ben Laurent, Senior Process Engineer, Heartland Water Technology, Inc

Wednesday | IOAM - 12PM

D8. NATURAL GAS & GRID TECHNOLOGY



D8.1 HYBRID SOLUTIONS PROVIDING GRID STABILITY AND RENEWABLE INTEGRATION Dalia El Tawy, Director-Thermal Power Solutions, Siemens



D8.2 WATER-FREE COMBINED CYCLE DISTRIBUTED POWER GENERATION Michael Welch, Industry Marketina Manager, Siemens Industrial Turbomachinery, Ltd.



BLACK & VEATCH D8.3 NATURAL GAS ASSETS TO SUPPORT THE EVOLVING ELECTRIC GRID Hua Fang, Director, Black & Veatch Management Consulting, LLC



Tier 1

D8.4 SMART CIT-HY WINDBUS AUXERRE FRANCE Emmanuel Schuddinck, CEO, Justy Energies Engineering

SUBMIT SPEAKING SLOTS AVAILABLE ABSTRACT

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TRACK | E | SO2, NOX & SCR CONTROL

ADVISORY BOARD TRACKE















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This Track provides current presentations on Advanced technologies and strategies, for compliance with SO2, NOx, CO2 emission limits at coal-fired boilers. Includes SCR, DSI, and measurement and contral in the cement and ash industry.

TRACK SPONSOR & CO-CHAIRS: (SUBMIT TO INFO@EUEC.COM)

Monday IPM - SPM



E1. CONTROL TECHNOLOGIES

In Mer E1.1 NOX CONTROL, AND A LOT MORE, WITH CATALYTIC CERAMIC FILTERS Rod Gravley, Technology Director, Tri-Mer Corporation; Kayla Olson, Kevin Moss



E1.2 EVALUATION AND APPLICATION OF AN AIR QUALITY MODELING SYSTEM TO ANALYZ Roberto San Jose, Head Professor, Technical University of Madrid (UPM); Juan L. Pérez, and Rosa Maria Gonzalez Barras



E1.3 ACID GAS REMOVAL CHARACTERISTICS OF CA(OH)2 IN A REAL SITE Han Jae-Won, Han-Yana University: Youna-Ok Park, Korea Institute of Eneray Research: Hui-Taek Kim, Han-Yang University



E1.4 FULL-SCALE DEMONSTRATION OF ENZYME-ENHANCED COAL COMBUSTION Wei-Pina Pan, Professor, Western Kentucky University



SPEAKING SLOTS AVAILABLE

Monday | SISOPM - 5.30PM



E2. DSI, SORBENTS, SCR & NOX CONTROL



E2.1 EXPLORING OXIDATION AND SCR CATALYST ON GAS FIRED UNITS Emily Kunkel, Senior Environmental Associates, Sargent & Lundy



E2.2 MINIMIZING NOX ANDHEAT RATE IN CHINESE COAL FIRED UTILITY BOILERS Richard Conn, Sr. Director of Technology, Sunco International; Jeff Shan, Sunco International: May Chen, Blue Horizon



SPEAKING SLOTS AVAILABLE

TRACK | E | SO2, NOX & SCR CONTROL

Tuesday 7.30AM - 9.30AM

E3. SO2. NOX & SNCR



E3.1 SODIUM SORBENTS FOR HIGHER EFFICIENCY Sponsor & Co-Chair - Michael Atwell, Manaaer, Solvay Chemicals; Cornelia Cretiu



E3.2 HIGH ACCURACY IN-SITU SO3, SO2 & H2SO4 SENSOR FOR COMBUSTION SOURCES Bob Finken, Senior Vice President, Montrose Air Quality Services; Dr. Peter Zemek



Tuesday | DAM - 12PM

E4. SCR & NOX CONTROL



E4.1 SOFT SENSORS FOR SOX AND NOX EMISSIONS Patrick Bangert, CEO, algorithmica technologies Inc.



E4.2 PRE AND POST COMBUSTION NOX CONTROL SYSTEM USING MICROWAVE TECH. Valentino Tiangco, Biomass Program Manager, SMUD



E4.3 FAST RAMP HOT SCR'S & UPGRADES TO COMPLY WITH FUTURE NOX BARCT RULES Robert McGinty, Sr. Product Mgr Gas Turbine & Ind. SCR Sys, Mitsubishi Hitachi Power Sys



E4.4 COMBINED CYCLE PLANT NOX REDUCTIONS Jeff Willilams, Manager, Emerson: J. Nvenhuis



E4.5 CFD MODELING FOR EVALUATING CONVERSION OF COAL TO GAS FIRED BOILER Praveen Gonuauntla, Senior CFD Enaineer, Tridiagonal Solutions, Inc; Abhay Panwalkar, Bharat Heavy Electricals Limited



E4.6 SELECTABLE CONTROL SYSTEM FOR SCR MANAGEMENT Bernadette Shahin, National Applications Manager, M&C TechGroup

Tuesday IPM - 3PM

E5. COAL ASH & CEMENT



ES.1 SELECTABLE CONTROL SYSTEM FOR SCR MANAGEMENT Rabindra Sinha, VP - Sales , Marketing & Technology, ARKAY Technologies



E5.2 CEMENT STABILIZATION OF CONTAMINATED SOIL AND CCR Paul Ruehl, US Environmental Remediation Coordinator, Lafarge Holcim



E5.3 CONCRETE AND CEMENT SPEC. COAL FLY ASH FROM A WASTE FLY ASH Christopher Poling, Engineering Director, SCB International Materials



SPEAKING SLOTS AVAILABLE

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TRACK | E | SO2, NOX & SCR CONTROL

ROOM 5A

Tuesday | 3:30PM - 5:30PM

ZUSGS

E6.1 MERCURY AND PYRITIC SULFUR REDUCTION IN CLEANED ILLINOIS BASIN COALS Allan Kolker, Research Geologist, U.S. Geological Survey, Liliana Lefticariu, Southern Illinois University; Maria Mastalerz, Indiana Geological Survey; Agnieszka Drobniak, Indiana Geological Survey, Clint Scott, U.S. Geological Survey; Anne Scott, U.S. Geological Survey

E6. COMPLIANCE TECHNOLOGIES & STRATEGIES



E6.2 BACT EMISSION LIMITS: THE DEVIL IS IN THE DETAILS David Shotts, Partner, ERM

SUBMIT ABSTRACT

SPEAKING SLOTS AVAILABLE

Thursday PM - SPM

Thursday | 3.30PM | 5.30PM

TRACK | F | RENEWABLE ENERGY

ADVISORY BOARD RACKE



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This Track provides current presentations on Renewable Energy technologies and strategies, including, solar, PV, wind, Nuclear, waste-to-energy, biogas, biomass, biodiesel, financing, and development case studies for peak shaving and FIT programs.

TRACK SPONSORS & CO-CHAIRS: (SUBMIT TO INFO@EUEC.COM)

Monday | IPM - 3PM

F1. BIOGAS, BIOMASS, BIODIESEL



Handwarks | F1.1 ANAEROBIC MBBR PROCESS FOR HIGH-STRENGTH WASTEWATERS Siva Angappan, Headworks Bio, Inc.; Dr. Somnath Basu



F1.2 TORREFIED BIOMASS SUCCESS AT THE PGE BOARDMAN PLANT Una Nowlina, Service Area Leader, Black & Veatch; Randy Curtis, Portland General Electric Boardman Power Plant



F1.3 INDUSTRIAL SYMBIOSIS THROUGH EFFECTIVE PUBLIC-PRIVATE PARTNERSHIPS Barry Edwards, Director of Utilities & Engineering, Catawba County



F1.4 DIRECTED BIOGAS SUCCESS AT THE UC SAN DIEGO MICROGRID FUEL CELL Clark Crawford, Director, Business Development, FuelCell Energy; Robert Nielsen



F1.5 POWER PRODUCTION FOR FUTURE SOLID WASTE RESOURCE RECOVERY FACILITY Matt Dunn, Principal Engineer, AECOM



F1.6 COMPUTATIONAL FLUID DYNAMICS SIMULATIONS OF ALGAE PHOTOBIOREACTORS Andres Philip Mayol, USAID STRIDE Visiting Scholar, The University of Arizona; Aristotle T. Ubando, Alvin B. Culaba and Joel L. Cuello

Monday 330PW 530PM

F2. WASTE TO ENERGY & WASTE MANAGEMENT

F2.1 PLASMA GASIFICATION; THE NEXT GENERATION OF WASTE-TO-ENERGY SERVICES Richard Fish, President, ALTER NRG CORP.

F2.2 FASTOX GASIFICATION: PROFITABLY ACIEVE 100% RECYCLING Mike G. Hart, Chief Executive Officer, Sierra Energy





F2.3 EMISSIONS ADN WASTE-TO-ENERGY SYSTEMS Tina Liu, Atmospherics Specialist, Advisian



F2.4 ELECTRICITY PRODUCTION FROM SRF USING A DOWNDRAFT GASIFICATION PROCESS Se-Won Park, Researcher, Yonsei University; Lee, Suna, Seo, Yonsei University; Oh, Samho environ-Tech; Gu, Institute for Advanced Engineering



F2.5 RECLAIMING CONTAMINATED LAND: DEPLOYING SOLAR ON BROWNFIELDS Cynthia Christensen, Commercial/Utility Sales Director, Namaste Solar



F2.6 WASTED ENERGY FROM COMPRESSED AIR LEAKS: WHAT ONE PILOT PROJECT FOUND Dan Nickey, Interim Director, Iowa Waste Reduction Center, University of Northern Iowa

F2.7 ENERGY FROM MUNICIPAL SOLID WASTE WITH MINIMAL CARBON EMISSION Surendra Saxena, Professor Emeritus, FIU; Siva Pillai, Innovision

TRACK | F | RENEWABLE ENERGY

Tuesday 7.30AM 9.30AM

F3. RENEWABLE ENERGY & MICROGRID



Consider F3.1 MICROGRIDS AN EFFECTIVE INFRASTRUCTURE ALTERNATIVE Gregg Edeson, Partner, PA Consulting Group; Jared Smith and Walter Rojowsky



F3.2 INTEGRATION OF A MICROGRID CONTROLLER & FAULT PROTECTION WITHIN AMEREN Christopher Evanich, Applications Director of Microgrids, S&C Electric



F3.3 PLANNING FOR THE FUTURE: NATIONA'S FIRST CYBER-SECURE UTILITY MICROGRID Christopher Evanich, Applications Director of Microgrids, S&C Electric



F3.4 STANFORD'S ENERGY SYSTEM LEADING BY EXAMPLE IN EMISSIONS REDUCTION Fahmida Ahmed, Director, Sustainability and Business Services, Stanford University

F3.5 NATURAL DISASTERS: A CALL TO ACCELERATE RESILIENCE Edward Rightor

Tuesday IOAM - 12PM

F4. RENEWABLE PROJECTS & DEVELOPMENT



F4.1 REDEVELOPMENT OF ELECTRIC UTILITY SITES - INTEGRATING RENEWABLE ENERGY Steven Putrich, Principal Engineer, Haley & Aldrich



F4.2 BIGGER MARKET THAN GRID: RE-SOURCE HYDROGEN TRANSPORTATION FUEL Bill Leighty, Director, The Leighty Foundation



F4.3 EVALUATION OF THE ENVIRONMENTAL IMPACT OF THE THERMAL SPACES Nasser Alhemiddi, Professor, King Saud Univ.; Abdulrahman Alhemiddi, Abdulaziz Alhemiddi



F4.4 BIRD IN THE HAND: SHOTGUNS, DEADLY OIL PITS, CUTE KITTENS & THE MBTA Samuel Panarella, Associate Professor of Law, University fo Montana School of Law



F4.5 RENEWABLE ENERGY PROD. AS MEANS FOR LOCAL ECONOMIC DEVELOPMENT Thobeka Radebe, Researcher, Human Science Research Council

Tuesday IPM 3PM

F5. WIND ENERGY



F5.1 CONVERTING WINDPLANTS TO DEDICATED, OFF-GRID HYDROGEN FUEL PRODUCT Bill Leighty, Director, The Leighty Foundation



F5.2 CONTROL OF A SELF-EXCITED INDUCTION GENERATOR IN A WIND TURBINE SYSTEM Woonki Na, Assistant Professor, California State University. Fresno; Edurad Muljadi



F5.3 OFFSHORE WIND ENERGY VS CONVENTIONAL IMPLEMENTATIONS Adel El-Shahat, Assistant Professor, Georgia Southern University; DeAnndra Dixon



F5.4 WIND ENERGY MARKET TRENDS AND CHALLENGES

Nathan Higgerson, Power Generation Project Manager, Hanson Professional Services, Inc.



SPEAKING SLOTS AVAILABLE

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TRACK | F | RENEWABLE ENERGY

Tuesday 3 30PM - 5 50PM



F6. SOLAR & PV

P6.1 SIMULATING SOLAR PHOTOVOLTAIC TECHNOLOGY DIFFUSION AND GRID STABILITY Jacob Monroe, PhD Student, North Carolina State University; Emily Berglund



F6.2 DEMAND CHARGE SAVINGS FROM SOLAR AND ASSOCIATED UTILITY COST SAVINGS Naïm Darghouth, Sr. Scientific/Engineering Assoc., Lawrence Berkely Nat'l Lab.; Galen Barbose, Andrew Mills, and Ryan Wiser; Pieter Gaanon and Lori Bird, NREL



F6.3 IMPACT OF DEGRADATION RATES ON SOLAR PV PROJECT FINANCIALS Matthias Gewalt, Manager of Solar Practice, Leidos Engineering



★OAK RIDG F6.4 A RESOURCE EVALUATION MODEL FOR A SOLAR VORTEX POWER GENERATION

Amy Moore, Post Doctoral Research Assistant, Oak Ridae National Laboratory



SPEAKING SLOTS AVAILABLE

Wednesday 730AM 930AM

F7. HYDRO, GEOTHERMAL, & NUCLEAR



F7.1 WHAT 1,000 GEOTHERMAL HEAT PUMPS WILL DO TO YOUR UTILITY Will Lange, Director of Sales and utility Marketing, WaterFurnace Renewable Energy



F7.2 A MICRO-SCALE HYDRO POWER SYSTEM FOR THE PHILIPPINE INDIGENOUS PEOPLES Randell Espina, Dean, Ateneo de Davao Univ; Renyl Barroca, Angelito Saluague, Leah Aportadera, Lourdesita Chan



NUSCALE F7.3 BEYOND BASELOAD: NUSCALE DIVERSE ENERGY PLATFORM Lenka Kollar, Director, Strategy & External Relations, NuScale Power; Chris Colbert



SPEAKING SLOTS AVAILABLE

Wednesday 10AM - 12PM

F8. RENEWABLE ENERGY



F8.1 SAN DIEGO STATE UNIVERSITY DEMONSTRATION & PROOF-OF-CONCEPT CENTER John McMillan, Co-Director SD-REIN, San Diego State University



F8.2 FEDERAL FACILITIES: DEVELOPING & FINANCING ENERGY RESILIENCE Seth Kirshenberd, Partner, Kutak Rock LLP



F8.3 HOW CORPORATE PPAS ARE DRIVING RENEWABLES GROWTH Scott Nystrom, Director, FTI Consulting; Ken Ditzel



16.1.3 NORS STATE | F8.4 PARAMETRIC ANALYSIS FOR COST-OPTIMAL RENEWABLE ENERGY INTEGRATION | Jin Jo, Associate Professor Illinois State University



F8.5 PV DEGRADATION MITIGATION - A COMMERCIAL PERSPECTIVE Matthias Gewalt, Manager of Solar Practice, Leidos Engineering



F8.6 SOLAR TECHNOLOGY EVOLUTION

Matthias Gewalt, Manager of Solar Practice, Leidos Engineering

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A D VISORY BOARD TRACK G







































This Track provides current presentations on current technologies and strategies, for decommissioning of power plants, boiler optimization, project finance, risk management, EMIS, EHS, Health & Safety, operation and maintenance in the electric utility industry.

TRACK SPONSOR & CO-CHAIRS: (SUBMIT TO INFO@EUEC.COM)

Monday | IPM - SPM

G1. DECOMMISSIONING OF POWER PLANTS



G1.1 IN-PLACE RETIREMENT OF POWER PLANTS - KEY CONSIDERATIONS AND APPROACH Co-chair - Jeffery Pope, Decommissioning & Demolition Services Mgr., Burns & McDonnell



G1.2 CLOSURE OF THE D-AREA CCR FACILITIES AT THE SAVANNAH RIVER SITE Tammy DeRamo, Technical Director, Envirocon; Andrew White and Tripp Winfree



G1.3 SOLVING PCB IMPEDIMENTS TO DECOMMISSIONING Stephen Mitchell, Senior Vice President, Weston Solutions, Inc.; J.D Groesbeck



G1.4 CHANGES TO PROJECT OBJECTIVES REQUIRES CHANGES TO PROJECT SCOPE Co-chair - Richard Cheatham, Scientist 5, CB&I; Gene Scott, Ken Beard & Andrew Schaaf



SPEAKING SLOTS AVAILABLE

Monday | 330PM - 530PM

G2. COMPLIANCE STRATEGIES & DECOMMISSIONING

G2.1 KCOM'S RIVERTON. KS EMPIRE DISTRICT ELECTRIC POWER PLANT IMPLOSION. Joel Spirtas, KCOM Demolition, Commercial / Industrial Demolition and Env. Remediation



TRACK | G | O&M. DDD, EHS

Tuesday 7:30AM 9:30AM

G3. OPERATIONS AND OPTIMIZATION



G3.1 MITIGATING CLIMATE EFFECTS ON PERFORMANCE OF CCGT-CO2 CAPTURE PLANTS Hugo Rodriguez, Project Manager, Rengen Energy Solutions

(C) Cold Jet

G3.2 MORE EFFICIENT POWER GENERATION THROUGH ENVIRONMENTAL RESPONSIBLE CI David Watson, Director, Business Development - Energy and Services, Cold Jet, LLC



G3.3 SF6 EMISSIONS FROM GAS INSULATED SWITCHGEAR (GIS) Yasmeen Sultana, Principal, Stantec; Jonya Blahut



Tuelseav I DAM - I2PM

G4. EHS & EMIS

© sphera:

G4.1 EXECUTION MEASUREMENTS TO INCREASE SAFETY PERFORMANCE Carrie Young, Managing Director, Sphera Solutions



G4.2 BETTER MANAGEMENT OF THE COVERSATIONS ABOUT YOUR DATA David Gloski, President, xOverTime: Michael Lehane



TrinityA G4.3 CONTINUOUS COMPLIANCE MANAGEMENT FOR UTILITY OPERATIONS Consultants, Adam Jackson, Managing Consultant, Trinity Consultants; Colt Sommers, Randall Nelson



G4.4 SPREADING AN EHS CULTURE USING SIMPLIFIED SOFTWARE AND DATA ANALYTICS John Niemoller, President, Perillon Software



SPEAKING SLOTS AVAILABLE

Tuesday IPM - 3PM

G5. PROJECT FINANCE, RISK MGMT

MILLER CTA

G5.1 INVESTMNT STRATEGIES FOR ENV. MKTS UNDER CURRENT STATE OF NEW REGS Nedia Miller, Principal, MILLER CTA



G5.2 SAUDI ARAMCO UPSTREAM ENVIRONMENTAL FOCUS - PAST, PRESENT, AND FUTURE Ensan El-Ayoubi, Southern Area Oil Operations Technical Support Department, Saudi



G5.3 HEALTH RISK: KEEPING YOUR POWER PROJECT AFLOAT DURING THE EARLY STAGE Joseph Sabao, Senior Scientist, Epsilon Associates

BURNS X MUDOWNELL

G5.4 MANAGING CONTRATOR CHANGE WITH UPFRONT AND AGREED UPON RATES Brendan O'Brien, Project Engineer, Burns and McDonnell; Jeff Pope



SPEAKING SLOTS AVAILABLE

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TRACK | G | O&M, DDD, EHS

Tuesday S.COPM - 5 COPM

G6. OPERATIONS & OPTIMIZATION

© sphera:

G6.1 HIGH-FREQUENCY DATA COLLECTION AND ENVIRONMENTAL ACCOUNTING Carrie Young, Vice President, Sphera Solutions



G6.2 A THREE YEAR INTERNATIONAL ENERGY CHALLENGE

Steven Driver, Global Energy Manager, Sanofi



G6.3 OPERATIONAL EFFICIENCY GAINS THROUGH GEOSPATIAL TECHNOLOGY ADVANCES Randy Rhoads, Geospatial Industry Manager, Utilities, Harris Corporation



G6.4 BEST PRACTICES TO REDUCE VENTING AND FLARING WITH ECONOMIC BENEFIT Jeff Voorhis, Engineer, HY-BON Engineering



G6.5 OPTIMIZATION OF PLANT PERFORMANCE USING MACHINE LEARNING Patrick Bangert, CEO, algorithmica technologies Inc.



G6.6 WIND EFFECTS ON AIR-COOLED CONDENSERS: WIND-TUNNEL 2-D FLOW FIELDS Ryan Parker, Project Engineer, CPP Wind Engineering

Wednesday | 7.30AM - 7.50AM





G7.1 FIT-FOR-DUTY TESTING IN THE ENERGY INDUSTRY Richard Bunch, CEO, WorkSaver Systems



G7.2 LAYERING DO'S AND DON'TS FOR ARC PLASH PROTECTION Derek Sang, Technical Training Manager, Bulwark Protective Apparel



G7.3 SAFE AND EFFICIENT COMBUSTION CONTROL IN GAS-FIRED BOILERS / TURBINES Barbara Marshik, Power Market Segment Mgr, Servomex; Stephen Firth, Josh Christian



Wednesday IOAM - I2PM

G8. OPERATIONS & MANAGEMENT



G8.1 FAILURE POTENTIAL OF RETROFITTED VFD IN COOLING TOWER Sarah AlKanderi, Research Assistant, Kuwait Institute for Scientific Research, Al-Bassam



G8.2 PERMIAN BASIN ENVIRONMENTAL SUCCESS STORY: REVENUE SHARING WITH VENT G Jeff Voorhis, Engineer, HY-BON Engineering



G8.3 DISRUPTION IN THE UNDERGROUND

Sean Gesell, Manufacturer's Rep., Armorcast Products Company



G8.4 INTEGRATING DEMAND RESPONSE INTO SYSTEM RELIABILITY PLANNING Paul Grod, President, Rodan Energy Solutions



G8.5 CONNECTICUT UTILITIES TURNKEY SOLUTION TO BENCHMARKING 95% OF THE STATE Sheri Borrelli, Senior Business Manager, United Illuminating; Samantha Sojka, Eversource



G8.6 CREATING AN OPERATING CULTURE FOR PREDICTABLE, CONSISTENT PERFORMANCE Peter Bridle, Managina Partner, Peaasus Risk Management

TRACK | H | GHG, ELG, CCR & CCS

ADVISORY BOARD RACK H

































This Track provides current presentations on current technologies and strategies concerning CCS, CCR, ELG and coal ash in the electric utility industry.

TRACK SPONSOR & CO-CHAIRS: (SUBMIT TO INFO@EUEC.COM)

Monday PM - 3PM

H1. CCR & ELG COMPLIANCE MGMT.



H1.1 NOVEL APPROACHES TO ELG COMPLIANCE

Tyler Cromey, Research Engineer, Southern Company Services



H1.2 DESIGNING A PERFORMANCE TEST PROGRAM FOR A CARBON CAPTURE PROCESS Rick Krenzke, Project Director, TRC



H1.3 STATES VS FEDS: WHO HAS THE BALL ON WATER AND ASH COMPLIANCE? Jason Eichenberger, Assoc. Civil Engineer, Burns and McDonnell



H1.4 USE OF SLURRY WALL SYSTEMS TO SUPPORT COR CLOSURE & CORRECTIVE ACTION Dale Evans, Senior Director of Technology, Remedial Construction Services; Kate Whysner



H1.5 MASS DISCHARGE METRICS TO SUPPORT REMEDY SELECTION AT COAL ASH SITES Stephanie Jones, Environmental Engineer, Geosyntec Consultants

Monday | SiGOPM - 5/30PM

H2. COAL ASH, CCR & FGD



H2.1GEOCHEMICAL ANALYSIS OF COAL ASH CONSTITUENTS IN DRINKING WATER Paula Panzino, Technical Expert, Haley & Aldrich, Inc.; Jacob Chu, Lisa Bradley



H2.2 RULES SHIFT AMERICA'S RESOURCE ABUNDANCE TO SHORTFALL Danny Gray, Executive Vice President, Charah, LLC



H2.3 HOW DENSE SLURRY TECHNOLOGY CAN HELP ACHIEVE ZERO LIQUID DISCHARGE Dale Timmons, Program Manager, NAES Corporation



H2.4 REQUALIFYING FLY ASH FOR BENEFICIAL USE/SALE USING AMENDED SILICATES Steve Baloga, P.E., VP Engineering and Environmental Services, Novinda Holdings, Inc.



H2.5 SELENIUM: HOW SULFUR'S LITTLE BROTHER COULD AFFECT WASTEWATER TREATMENT Nick Nelson, Vice President, Barr Engineering



H2.6 RECLAIMING AND RECYCLING COAL COMBUSTION RESIDUALS FOR BENEFICIAL USE Bill Fedorka, Executive Director, Advanced Technology and Projects, SEFA

TRACK | H | GHG, ELG, CCR & CCS

Tuesday | 7:30AM - 9:30AM



H3. CCR RULE

H3.1 GROUNDWATER MONITORING AT CCR FACILITIES: NEXT STEPS Tammy Rauen, Senior Enaineer, Golder Associates; Craia Schuettpelz, Todd Stona



H3.2 CCR DATA MANAGEMENT: TOOLS TO AUTOMATE DATA COLLECTION & ANALYSIS Christine Lew, Manager, Environ. Software/Data Mamnt Svcs, Tetra Tech, Michael Ungs



H3.3 CCR RULE LOCATION RESTRICTION FUNDAMENTALS & STRATEGIES Eric Nelson, Vice President, Senior Project Manager, SCS Engineers



H3.4 SITING & DESIGN OF NEW UWLS AND GWM SYSTEMS PURSUANT TO THE CCR RULE Gary Pendergrass, Principal Geological Engineer & Environmental Group Leader, GeoEngineers, Inc.



H3.5 HONEY I SHRUNK THE POND: CONSIDERATIONS FOR TANK BASED LOW VOLUME

Dave Guinta, Chemical Engineer, Burns & McDonnell; Jared Troyer, Duke Energy

Tuesday IDAM - 12PM

H4. CCR & ELG

AECOM

H4.1 TURNING THE CORNER - CCR MANAGEMENT AFTER OCTOBER 17 (INVITED) Mark Rokoff, Vice President, AECOM

SUGNS SMEDONNELL.

H4.2 EVALUATION OF CCR GROUNDWATER MANAGEMENT STRATEGIES John Hesemann, Regional Envionmental Practice Mgr, Burns & McDonnell; Wayne



H4.3 LESSONS LEARNED FROM ELG COMPLIANCE PROJECTS

Kevin McDonough, Vice President of Sales and Marketing, United Conveyor Corporation



H4.4 ENGINEERED IMPOUNDMENTS TO MANAGE CCRS AND LOW VOLUME WASTEWATER Rvan Shedivy, Project Geological Engineer, Golder Associates, Craia Schuettpelz, Todd Stong, Golder Associates; Jennifer Charles, Great River Energy



H4.5 OPERATE LIKE THERE IS NO TOMORROW WITH CCR UNIT CLOSURES IN MIND Jason Pokorny, Senior Project Manager, Haley & Aldrich

Descioy PM - SPM

H5. COAL ASH, CCR & FGD

Paul Piaeon, Associate, Golder Associates



H5.1 PURSUING 100% CCP BENEFICIAL USE... AND BEYOND Neal Kochis, Senior Project Manager, Haley & Aldrich



H5.2 CCR LANDFILL CHALLENGES FROM SITING THROUGH CONSTRUCTION Gabe Lang, Associate Vice President, Charah, LLC



H5.3 MICROWAVE-ASSISTED RECOVERY OF REES FROM COAL AND COMBUSTION Megan Macala, Research Scientist, AECOM; Elliot Roth, AECOM; Tracy Bank, AECOM;



Phillip Tinker, AECOM; Bret Howard, U.S. Dept. of Energy NETL; Evan Granite, U.S. Dept. of Energy NETL H5.4 PROTECTING THE "CLOSED LOOP" IN WET BOTTOM ASH SYSTEMS



SPEAKING SLOTS AVAILABLE

TRACK | H | GHG, ELG, CCR & CCS

Tuesday | 330PW - 550PM

H6. FGD. ELG. CCR & CCS



BYOQUA HE. I ADVANCES IN NON-BIOLOGICAL POWER WASTEWATER TREATMENT Charles McCloskey, Industrial Wastewater Business Manager, Evoqua Water Technologies

H6.2 FGD AND WASTE VOLUME REDUCTION - CASE STUDY ON THERMAL EVAPORATION



PRINCE Clark Harrison, Director, Power Generation Business Development, Purestream Services



H6.3 BOTTOM ASH OPTIONS FOR ELG AND CCR COMPLIANCE Gerald Long, Manager, North America, United Conveyor Corporation



H6.4 RESPONSIBLE MANAGEMENT OF FGD BYPRODUCTS Keith Ambrose, Chemical Engineer, Duke Energy



SPEAKING SLOTS AVAILABLE

Wednesday 7 30AM - 7 30AM



H7. CCS: CARBON CAPTURE & STORAGE H7.1 STATUS OF TECH DEVELOPMENT AT THE NATIONAL CARBON CAPTURE CTR (INVITED) Roxann Laird, Director - National Carbon Capture Center, Southern Co.; Frank Morton



H7.2 FTIR MONITORING SYSTEM PROVIDES TIGHTER CONTROL ON EMISSIONS FROM C Co-Chair - Jim Cornish, Sales & Support Manager, Gasmet Technologies



H7.3 POLICY PARITY FOR CARBON CAPTURE Heather Greenley, Program Coordinator, USEA

SUBMIT SPEAKING SLOTS AVAILABLE ABSTRACT

Wednesday IDAM 12PM

H8. LANDFILL GAS & RARE EARTH ELEMENTS



H8.1 RECOVERY OF RARE EARTH METALS FROM COAL COMBUSTION RESIDUALS Joseph Laurino, President, Periodic Products, Inc.; Zachary Huba



H8.2 RARE EARTH ELEMENTS IN COAL AND COAL COMBUSTION PRODUCTS Elliot Roth, Research Engineer, NETL/AECOM; Megan Macala, AECOM/NETL; Ronghong Lin, ORISE; Tracy Bank, AECOM/NETL; Bret Howard, NETL; Evan Granite, NETL; Yee Soong, NETL



H8.3 A METHOD FOR PREDICTING CCR LANDFILL LEACHATE GENERATION VOLUME Cedric Ruhl, Senior Engineer, Wood Group PLC.



H8.4 DETERMINATION OF RARE EARTHS IN COAL COMBUSTION BY-PRODUCTS Evan Granite, Research Chemical Engineer, USDOE / NETL; Elliot Roth - NETL, Tracy Bank -NETL, Mary Anne Alvin - NETL, Ken Ladwig - EPRI

Coriolis Enterprises

H8.5 INNOVATIVE METHODOLOGIES FOR ASSESSMENT, IDENTIFICATION & MITIGATION Hari Gupta, Director, Coriolis Enterprises

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ADVISORY BOARD TRACK I



This Track provides current presentations on current technologies and strategies, concerning water and wastewater management, including 316 (b), cooling towers, FGD, ZLD, coal ash, and remediation in the electric utility industry.

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Monday | IPM - 3PM

II. WASTEWATER MANAGEMENT

BURNS & MEDONNELL

11.1 PARTNERING WITH BIG INDUSTRY TO REDUCE NUTRIENT POLLUTION Sarah Gilstrap, Senior Environmental Scientist, Burns & McDonnell Engineering Company



11.2 CCR WATER SAMPLING AND ANALYSIS DATA QUALITY ISSUES David Thal, Principal Chemist, Environmental Standards, Inc.; Vitale, Gable, Dicken, Martin



11.3 A PROMISING ASH POND WATER TREATMENT METHOD UTILIZING FLYASH Jeong-Yun Won, Senior Geotechnical Engineer, Barr Engineering Company



11.4 EFFECTIVE CLARIFICATION TO MEET TIGHT TRACE METAL LIMITS Dennis Fink, Water for Power Lead, CH2M; Thomas E. Higgins and Mary McCloud



11.5 THERMAL EVAPORATIVE WASTEWATER TREATMENT: SCALE CONTROL & MGMT Todd Whiting, Sr. VP Power Generation Operations, Purestream Services

Monday | 3.30PM - 5.30PM

12. GROUND WATER, REMEDIATION & 316(b)

CHAOTICWATERS 12.1 A PARADIGM SHIFT IN WATER TREATMENT





12.2 APPLICATION OF DEMULSIFICATION METHOD FOR TREATMENT OF OILY WATER Karim Ghasemipanah, Group Manager of Water and Wastewater Treatment Research, Research Institute of Petroleum Industry; Sadegh Shokouhi, Kimia Saba Sahand Shahraz



12.3 ALTERNATE SOURCE DEMONSTRATION USING MULTIVARIATE STATISTICS Natasha Hausmann, Senior Scientist, ERM; Brian Bjorklund



12.4 CAPACITIVE DEIONIZATION OF A METAL-CONTAMINATED UNDERGROUND WATER H. Paul Wang, Professor, National Cheng Kung University, Chong, Nat'l Cheng Kung Univ; J. Wana, Univ. of Cal, San Diego; Wei, Tunahai University, Lin, National Tsing-Hua University

SHERRITE SPEAKING SLOTS AVAILABLE ABSTRACT

TRACK | | | | WATER & 316(b)

Tuesdev 7.30AM 9.30AM



13.316(b)

13.1 INTER-YEAR VARIABILITY IN IMPINGEMENT AND ENTRAINMENT RATES Greg Seegert, Chief Ichthyologist, EA Eng.; J. Rager & J. Vondruska, EA; D. Dixon, EPRI

BURNS SMIDONNELL

13.2 PEER REVIEWER IDENTIFICATION, SELECTION AND MANAGEMENT Christopher Wiggins, Sr. Aquatic Scientist, Burns & McDonnell



13.3 USE OF CFD TO OPTIMIZATION A FISH RETURN DISCHARGE LOCATION ALD Nathaniel Olken, Principal Engineer, Alden Research Laboratory



13.4 A CONSORTIUM APPROACH TO 316(B) FOR FACILITIES ON THE MISSISSIPPI RIVER Kurtis Schlicht, Technical Director, Environmental Resources Management



13.5 GREEN ALTERNATIVES FOR WATER SUPPLY DEVELOPMENT Henry Hunt, Sr. Project Manager, Layne-Ranney



13.6 CASE STUDY OF RETROFITTING THE DAIRYLAND MADGETT PLANT INTAKE Brett DeRousse, National Account Manager, Hydrolox; Mike McCullick; Dairyland Power

Tuesday | IDAM - I2PM

14. FGD WASTEWATER & ZLD



14.1 INNOVATIVE FGD WASTEWATER TREATMENT ADN ZLD OPTIONS Malcolm Man, Executive Vice President, Saltworks Technologies, Inc.; Ben Sparrow



14.2 ADVANTAGES OF ZLD COMPLIANT DENSE SLURRY ASH DISPOSAL SYSTEMS (DSS) Tobias Lutz, Product Manager, Putzmeister Solid Pumps GmbH; Uli Freitag



14.3 ENTRAINMENT STUDIES AT THE ALLIANT EDGEWATER GENERATING STATION ON LAK Christopher Wiggins, Sr. Aquatic Scientist, Burns & McDonnell



14.4 USING BRINE ENCAPSULATION TECH. TO MANAGE POWER PLANT WASTEWATER Durestream Clark Harrison, Director of Business Development, Purestream Services; Todd Whiting



SPEAKING SLOTS AVAILABLE

Tuesday | IPM - 3PM

15. FGD WASTEWATER & ELG



15.1 INVESTIGATING OPTIONS FOR CLOSING THE BOTTOM ASH LOOP Krystal Perez, Industrial Water-Power Practice Lead, CH2M



15.2 ASSESSMENT OF HEAVY METALS POLLUTION OF SOME WATER RESOURCES Abdrabelnabi Abdelhady, Professor, Damanhour University; Abdelaty, E. F.



15.3 FO TECHNOLOGY FOR FGD WASTEWATER PRODUCES ELG COMPLIANT STREAM Margarita Luis, Vice President - Inside Sales, Fluid Technology Solutions, Inc.; Fabian Solbera; Eisenmann



15.4 NANO-FILTRATION TREATMENT OF FGD WATER TO MEET ELG STANDARDS Jonathan Chen, Process Engineer, BKT



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TRACK | 1 | WATER & 316(b)

Tuesday 3:30PM 5:30PM

16. 316(b), ELG, WASTEWATER

16.1 LOW VOLUME WASTEWATERS: COLLECTING DATA FOR CRITICAL DECISIONS Karen Burchardt, Associate Environ. Engineer, Burns and McDonnell, Douglas Randall

16.2 SECTION 316(A) COMPLIANCE ON LARGE FRESHWATER RIVERS аквиг Умгосияетт Christopher Wiggins, Sr. Aquatic Scientist, Burns and McDonnell

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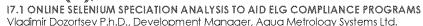
16.3 REAL TIME ORGANIC DISCHARGE CONTROL FOR FGD WASTEWATER Amanda Scott, Product Manager & Applications Specialist, GE Analytical Instruments

16.4 ONLINE MULTI-METALS WATER ANALYZER FIELD DEMONSTRATION Troy Pittenger, R&D Director, Cooper Environmental Services; Brian Edge



Wednesday 7 SOAM 9 SOAM

17. 316(b), COOLING WATER & SELENIUM





17.3 PHOTODEGRADATION OF IBUPROFEN BY G-C3N4/BI2WO6/RGO UNDER VISIBLE LIGHT

Shou-Heng Liu, Professor, National Cheng Kung University



Nednesday DAM ZPM

18. WATER SUPPLY & SECURITY

18.1 ASSESSMENT OF HEAVY METALS POLLUTION OF SOME WATER RESOURCES حابها تمتمور Abdrabelnabi Abdelhady, Professor, Damanhour University

18.2 IT'S NOT JUST WATER - THE SCIENCE AND IMPORTANCE BEHIND COLLECTING REP ® Klewit Michael McMenus, Sr. Process Specialist, Kiewit Engineering

> 18.3 RESILIENCE & ADAPTATION: EVALUATING RISKS TO THE YUKON RIVER WATERSHED Lawrence Duffy, Professor, University of Alaska Fairbanks: KL Dunlap, BH Dainowski

> 18.4 ENERGY EFFICIENCY IN WATER/WASTEWATER SYSTEMS Guru Navaneetham, Engineering Supervisor, Lincus, Inc.; Sabarish Vinod and Jorj Nofal

SUBMIT SPEAKING SLOTS AVAILABLE ABSTRACT

TRACK | J | BATTERY & STORAGE





This Track provides current presentations on current technologies and strategies, concerning energy storage, batteries, charging, EV, and PHEV

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Monday IPM SPM

J1. CHARGING & TRANSPORTATION

J1.1 HYBRIDIZATION OF COMMUTER PASSENGER RAIL Dave Cook, CTO, Rail Propulsion Systems

J1.2 ELECTRIFYING FLEETS: CAN IT BE DONE? Tim Echols, Commissioner, State of Georgia

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₩OAK RIDGE

- eMotorWerks

EVOLVED

WIRELESS

BEFORE

J1.3 LARGE BATTERY ENERGY STORAGE: STATIONARY AND V2G Paul Scott, VP - Advanced Technologies, TransPower; Joshua Goldman

J1.4 MODELING ENERGY-SAVING FREIGHT DELIVERY SCENARIOS Amy Moore, Postdoctoral Research Associate, Oak Ridge National Laboratory

J1.5 EV TO GRID INTEGRATION - HOW IT WORKS. WHY IT MATTERS. Preston Roper, Chief Marketing & Operating Officer, eMotorWerks

Manday SCOPN - 5 COPN

J2. EV & PHEV

J2.1 HEAVY RAIL WAYSIDE ENERGY STORAGE SYSTEMS FOR PASSENGER AND FREIGHT Brian Yanity, Research Engineer, Rail Propulsion Systems

J2.2 EUMINATING THE HARM OF BUNDLED-COST OR BUNDLED-BENEFIT CAR PARKING Michael Bullock, Transportation Advisor, Evolved Wireless, Inc.

J2.3 ENERGY STORAGE & MGMT FOR TRANSPORTATION & STATIONARY ENERGY USE (INVITED)

Andrew Frank, CTO, Efficient Drivetrains Inc.

SPEAKING SLOTS AVAILABLE ABSTRACT

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TRACK | J | BATTERY & STORAGE

Luesday 7.30AM 9.30AM

J3. BATTERY & STORAGE SYSTEMS

"leidos

J3.1 IMPLICATIONS DUE TO THE ABSENCE OF USE CASE TESTING STANDARDS

Cory Schaeffer, Senior Consultant, Leidos Engineering

Lumma.

J3.2 THE VALUE OF OPTIONALITY IN DEPLOYING GRID STORAGE Max Henrion, CEO, Lumina Decision Systems; Kimberlyl Mullins

UC San Diego

J3.3 TBD

John H. Holmes, Industry Alliance Officer, University of California San Diego



SPEAKING SLOTS AVAILABLE

Tuesday | 10AM - 12PM 14. BATTERY 8. STORAGE



J4.1 ASSURANCE IN ENERGY STORAGE SYSTEMS: IDENTIFYING AND MINIMIZING RISK (INVITED)

Haiwen (Howard) Liu, Sr. Staff Engineer/Engineering Team Lead, Intertek Testing Services NA, Inc.; Brad Affeldt



J4.2 FREQUENCY REGULATION ENERGY STORAGE SYSTEM IN KOREA (INVITED)
David Nickerson, Director of Business Development, LSIS Co., Ltd.; Joowon Yoon



J4.3 SOLAR + STORAGE: IF YOU CAN MAKE IT HERE, YOU CAN MAKE IT ANYWHERE Ronald Spalter, Deputy Chief Operating Officer, City University of New York

Tuesday IPM SPM

J5. BACK-UP PWR & ENERGY STORAGE



J5.1 MODULAR LNG: ALTERNATIVE BACK-UP ENERGY SUPPLY FOR POWER GENERATORS (INVITED)

Michael Nicoloro, Senior Vice President, Sanborn, Head & Associates; Joan Fontaine



J5.2 MAINTAINING SYSTEM VOLTAGE WITH BATTERY STORAGE Craig Dalziel, Director, GP Strategies; Gary Tindall, AES Corporation



TRACK | J | BATTERY & STORAGE

Tuesday 3.30PM - 5.30PM

J6. ENERGY STORAGE TECHNOLOGY

 J6.1 ENERGY STORAGE < \$ 1.00 / KWH CAPEX: HYDROGEN & AMMONIA FUELS Co-Chair - Bill Leighty, Director, The Leighty Foundation

Willow Springs Water Bank

J6.2 ENERGY STORAGE AT GROUNDWATER BANKS
Mark Beuhler, General Manager, Willow Springs Water Bank; Lon W. House, Water and
Energy Consulting



J6.3 HYDROGEN AS ENERGY STORAGE MEDIUM AND FUEL FOR SIGT Joshua Partheepan, Assistant Professor, West Texas A&M University, Emily Hunt



J6.4 ECONOMIC DISPATCH OF LIQUID AIR POWER & STORAGE William Conlon, President, Pintail Power LLC;



J7. BATTERY & STORAGE SYSTEMS



J7.1 JCESR - A NEW PARADIGM FOR ENERGY STORAGE RESEARCH (INVITED)
Devin Hodge, Deputy Director for Operations, Argonne National Laboratory



SPEAKING SLOTS AVAILABLE

J8. TRANSPORTATION

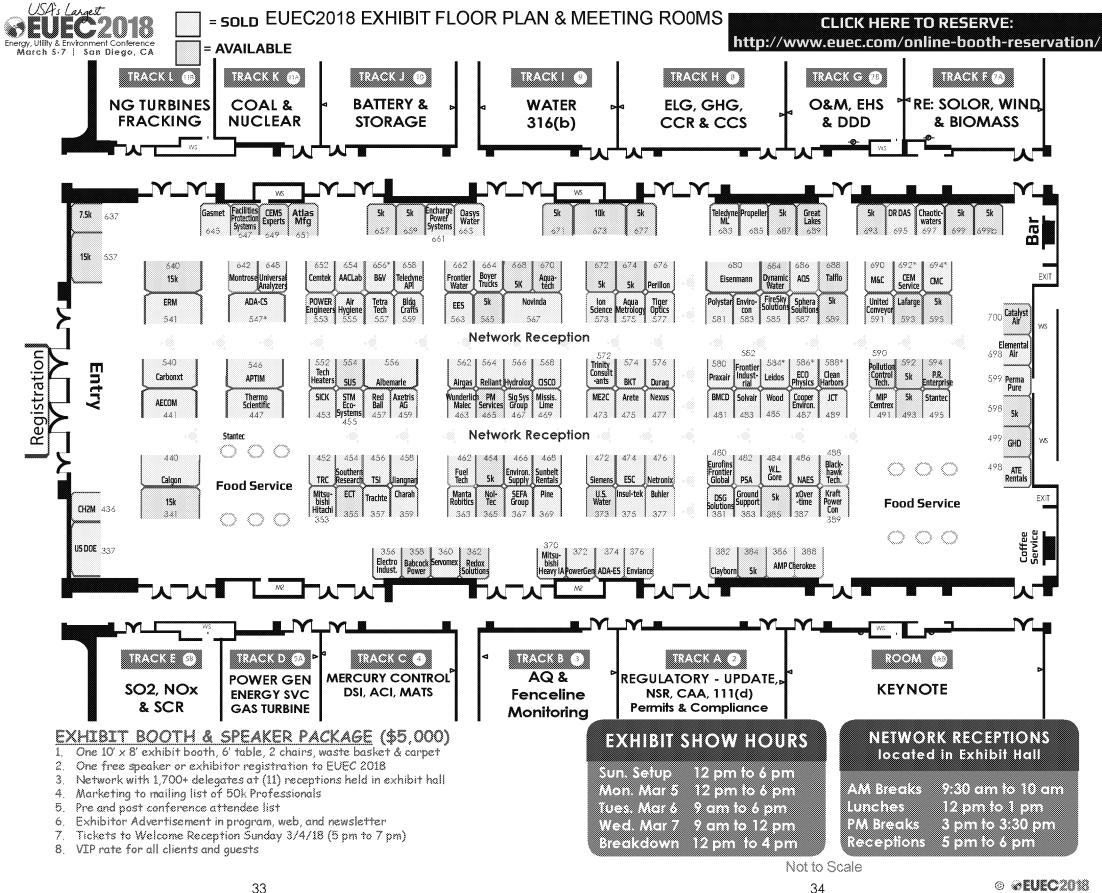


J8.1 GRID SCALE ENERGY STORAGE PROSPECTS AT ISO/RTO (INVITED)
Rao Konidena, Principal Advisor, Midcontinent ISO



JB.2 FUELING THE ENERGY STORAGE REVOLUTION (INVITED)
Andrew Miller, Analyst, Benchmark Mineral Intelligence





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|----------------------|------------------------------|------------|-------------------------------|-----|-----------------------------|
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| 640 | Airtech Environmental | 474 | Environmental Systems(ESC) | 362 | Redox Solutions |
| 556 | Albemarle | 541 | ERM | 564 | Reliant CEM Services |
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| 546 | APTIM | 647 | Facilities Protection Systems | 367 | SEFA Group, Inc, The |
| 575 | Aqua Metrology Systems | 585 | FireSky Solutions | 553 | Sega, Inc. |
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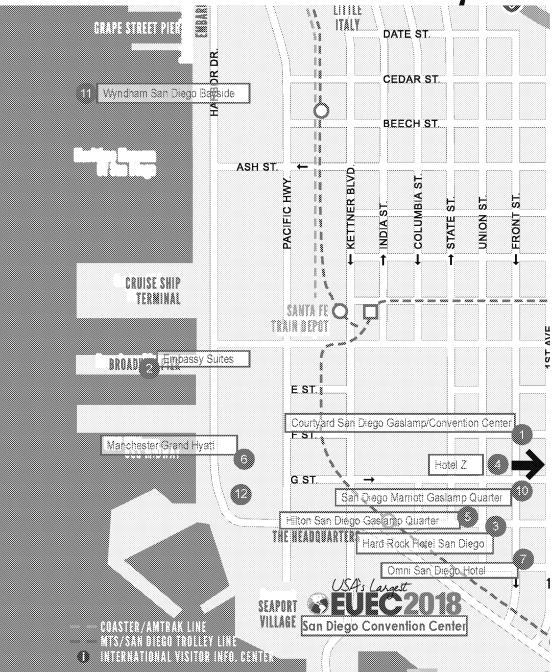
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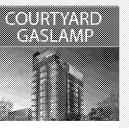
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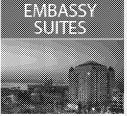
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0.5 Wiles to event



\$219

0.3 Miles to event



(800) 362-2779

\$259

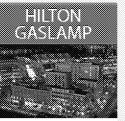
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(800) 996-3426

\$169

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(800) 445-8667 \$259

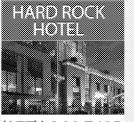
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(800) 849-6664

\$259

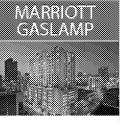
G2 Miles to event



(877\) 344-7625

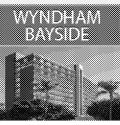
\$269

0.1 Miles to event



BOOK NOW \$255

Q.2 Miles to event



BOOK NOW \$159

1.3 Miles to event

Beware of unauthorized phone solicitation.

Sierra Club v. EPA 18cv3472 NDCA

Media Partners AP



















CHARGED

















MAPŠearch



| Sunday | Mar | CN 41 | m |
|---------|--------|-------|-------------|
| 7:00 am | - 7:00 | pm | Registratio |

12:00 pm - 6:00 pm Exhibit Set-up 5:00 pm - 7:00 pm Welcome Reception

Monday | March 5th

| 7:00 am | - | 7:00 pm | Registration |
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9:00 am - 12:00 pm Plenary Session

12:00 pm - 1:00 pm Networking Lunch 1

| 1:00 pm | _ | 3:00 pm | Tech Session |
|---------|---|---------|--------------|

3:00 pm - 3:30 pm Networking Break 2

| 3:30 pm | _ | 5:30 pm | Tech | Session | 2 |
|---------|---|---------|------|---------|---|

4:00 pm - 6:00 pm Networking Reception 3

Tuesday | March 6th

| 9:00 am | ~ (| 6:00 | pm | Exhibits | Open |
|-------------|-----|------|----|----------|------|
| | | | | | |

7:30 am - 9:30 am Tech Session 3

9:30 am - 10:00 am Networking Break 4

10:00 am - 12:00 pm Tech Session 4

12:00 pm - 1:00 pm Networking Lunch 5 1:00 pm - 3:00 pm Tech Session 5

3:00 pm - 3:30 pm Networking Break 6

3:30 pm - 5:30 pm Tech Session 6

4:00 pm - 6:00 pm Networking Reception 7

Wednesday | March 7th

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| 7:30 am | - | 9:30 am | Tech Session 7 |

9:30 am - 10:00 am Networking Break 8

10:00 am - 12:00 pm Tech Session 8

12:00 pm - 4:00 pm Exhibit Tear Down

ALL 8 NETWORKING EVENTS ARE HELD IN EXHIBIT HALL

SPEAKER FORMAT

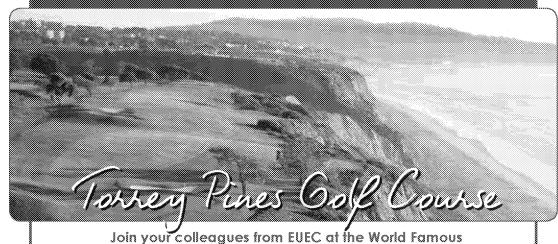
- · All speakers limited to 20 minutes using PowerPoint
- Submit abstract online and select track and session of choice
- Each session is 2 hours long with 6 speakers and 2 co-chairs

EUEC WELCOME RECEPTION BY THE WATERFRONT Sunday, March 4th, 2018, 5 pm to 7 pm



Pick up complimentary hors d'oeuvres and beverage tickets at EUEC Realistration Desk

7th Annual EUEC Golf Event Sunday March 4th 2013 at 8:00AM



Torrey Pines Golf Course 11480 North Torrey Pines Road La Jolla, CA 92037 (858)452-3226

Sponsorship

- You choose one of our exclusive packages or we can help you create one
- Create a package customized to fit your specific needs or desired investment level
- Sponsorship Program will help you focus directly on your target audience
- Provides maximum branding, recognition and return on investment.

1. One Page Advertisement In Show Guide – \$1,000

The Show Guide is the official, up-to-date information on the EUEC event. One page color Advertisement distributed to 1,500 delegates, is continously referenced multiple times a day by all attendees. You can have your logo included or do two facing page ads. CMYK, 5.875 x 9.5, 1/4 in bleed

2. Session Sponsor & Company Logo Ad – \$500 per session

Sponsor a Technical Session that you are Co-chairing and speaking for only \$500, with your company logo prominently advertised among the leading experts in the industry.

3. Advertisement in ENERGYNews - \$500 per issue

Leverage the EUEC network to reach 50,000 professionals in the energy utility and environment sector in North America. Place your logo and advertisement on ENERGYNews (linked to your website) announcing your new product, service or just your exhibit and speaking topics!

4. Attendee Lanyard And Badge Holders – \$3,000

This package includes logo placement on lanyards of the attendee name badge holders.

5. Golf Sponsor - \$3,000

Exclusive sponsorship of the 2017 EUEC golf tournament with recognition at the opening breakfast, and closing awards luncheon. Includes two foursomes in the tournament, welcome banner at the course, tee signs and sponsor logo on the pairings form. A custom golf gift with company logo will be given to each player.

6. Hotel Key Cards - \$5,000

Effectively place your business card in every attendee's pocket. Four-color custom design imprinted on Hotel Key Cards distributed to all attendees staying at official show hotels.

7. Your Logo On Flash Drive Conference Proceedings – \$8,000

What's more important to the conference delegates after the event than the complete conference proceedings? This package allows maximum take-home exposure with your logo on the top of every credit-card type flash drive. A full electronic brochure advertisement of your company is included in the flash drive.

8. Lunch / Reception Sponsorship – \$5,000 - \$15,000

As a Network Reception sponsor you will have your name and logo in front of conference attendees on each meal ticket.

9. Corporate Furnished Offices for client meetings - \$1,500 (3-days) (\$5,000 for non-exhibiting companies)

Exhibiting Companies can invite your clients, partners and business associates into a hardwalled private furnished office to conduct business. The private meeting rooms are located next to the exhibit hall. See floor plan. 10 x 10 offices are furnished with table and 4 chairs. Cost is \$1,500 for three days of conference. Upgradable to size(10 x 20) with sofas and tables, with food, etc.

CONTACT

Phone: (520) 615-3535 email: info@euec.com

Electric Utilities Attending EUEC

AES

Alabama Power Company

ALLETE

Alliant Energy Corporation

Ameren Corporation

American Electric Power

American Municipal Power, Inc.

Arizona Electric Power Cooperative

Arizona Public Service Company

Associated Electric Cooperative, Inc.

Austin Energy

Basin Electric Power Cooperation

Big Rivers Electric

Burbank Water & Power

Calpine Corporation

Central Iowa Power Cooperative

Central Minnesota Municipal Power Agency

Clarke Public Utilities

Cleco Corporation

Con Edison

Connecticut Natural Gas

Constellation Energy

Consumers Engergy

CPS Energy

Deseret Power

Diamond Generating Corporation

Dominion Generation

DTE Energy

Duke Energy

Dynegy

East Kentucky Power Cooperative

Edison Electric Institute

Empire District Electric Company

Encina Power Station

ENGIE North America

Entergy Services

Eversource Energy

Exelon Power

FirstEnergy Corp.

Florida Power & Light Company

Grand Bahama Power Company

Great River Energy

Guam Public Utilities Commission

Hawaiian Electric

Hoosier Energy

Independence Power & Light

Intermountain Power Service Corporation

JEA

Kansas City Board of Public Utilities

Kansas City Power & Light

KU Energy,LLC

Lansing Board of Water & Light

LG&E

Louisville Gas & Electric

Lower Colorado River Authority

Luminant

Madison Gas & Electric

Michigan South Central Power Agency

MidAmerican Energy Company

Minnesota Power

Minnkota Power Cooperative, Inc.

Montana-Dakota Utilities Company

Muscatine Power and Water

Nebraska Pulbic Power District

Newmont Nevada Energy Investment

NextEra Energy

NiSource

Northern Indiana Public Service Co.

Northern Star Generation

NorthWestern Energy

Nova Scotia Power

NRECA

NRG Energy

NV Energy ODEC

Oklahoma Gas & Electric Company

Old Dominion Electric Cooperative

Omaha Public Power District

Orange Grove Energy

Pacific Gas & Electric

PCPS Energy

PECO Energy

Platt River Power

Portland General Electric

PPL EnergyPlus LLC

PPL Montana LLC

Prarrie State Generating Co.

Puget Sound Energy - PSE

Riverside Public Utilities

Rochester Public Utilities

Rodan Energy Solutions Inc.

Rural Electric Cooperative

Sacramento Municipal Utility District

Salt River Project

San Diego Gas & Electric

San Diego Water Authority

Santee Cooper

SCANA

Schneider Electric

Seattle City Light

Sempra US Gas and Power

Sierra Power Company Southern California Edison

Southern Company

Southern Connecticut Gas

Southern Power Company

Sunflower Electric Power Corporation

Tennessee Valley Authority
Texas Municipal Power Agency

The United Illuminating Company

Tri-State Generation and Transmission

Tucson Electric Power

Vectren Corp.

WEC Energy Group

Westar Energy

Xcel Energy

ED 002061 00184174-00021

42

Tier 1

From: Kuhn, Thomas [TKuhn@eei.org]

Sent: 11/10/2017 9:54:28 PM **To**: wwehrum@hunton.com

CC: Wehrum, William [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]

Subject: Congratulations

Bill: On behalf of the Edison Electric Institute (EEI) and its member companies, I want to congratulate you on your confirmation as Assistant Administrator for Air and Radiation. The Administration is fortunate to have someone with your experience and knowledge to serve in such a demanding role.

Your unique legal and engineering background and understanding of complex Clean Air Act issues makes you one the most qualified individuals ever to lead the Office. Your skills and knowledge will be invaluable to Administrator Pruitt as the Agency works to protect public health and the environment, in tandem with states, while at the same time ensuring that the nation maintains jobs, and affordable and reliable supplies of energy.

EEI and I look forward to working with you in your new capacity. Please don't hesitate to call on me or any EEI team member if we can be of assistance.

Tom Kuhn President Edison Electric Institute

Ex. 6 tkuhn@eei.org



From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 3/23/2018 12:07:34 PM

To: Weisiger, Katherine [kweisiger@hunton.com]

Subject: RE: Another Question

Ex. 6

From: Weisiger, Katherine [mailto:kweisiger@hunton.com]

Sent: Tuesday, March 20, 2018 10:39 AM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov>

Subject: RE: Another Question

Ex. 6

Katherine



Katherine B. Weisiger

Retirement Manager kweisiger@hunton.com

p **Ex. 6**

Hunton & Williams LLP Riverfront Plaza, East Tower 951 East Byrd Street Richmond, VA 23219 hunton.com

From: Weisiger, Katherine

Sent: Thursday, March 08, 2018 3:57 PM

To: 'Wehrum, Bill'

Subject: RE: Another Question

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, March 08, 2018 3:17 PM

To: Weisiger, Katherine

Subject: Re: Another Question

Ex. 6

Bill Wehrum

Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

On Mar 8, 2018, at 1:09 PM, Weisiger, Katherine < kweisiger@hunton.com> wrote:

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, March 08, 2018 12:51 PM

To: Weisiger, Katherine **Subject:** Another Question

Ex. 6

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 5/18/2018 9:09:21 PM

To: Field, Andrea [afield@hunton.com]

Subject: RE: ACOEL Interview

Thanks Andy. I appreciate the feedback. I'm glad folks found it useful. Also, you did a very nice job of moderating. Hope you have a great weekend.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Field, Andrea [mailto:afield@hunton.com]

Sent: Friday, May 18, 2018 1:28 PM
To: Wehrum, Bill < Wehrum. Bill @epa.gov>

Subject: RE: ACOEL Interview

Thanks again, Bill. Upon returning to my office, I saw that I had received many complimentary emails – and the compliments were primarily directed at you! For example, John Cruden told me that he was driving when he initially called into the interview, but he became so engrossed in what you were saying that he chose to pull over to the side of the road for the rest of the interview so that he could give it his full attention.

In addition to folks telling me how great you were, they also directed me to thank you for doing the interview, and so I will again convey those heartfelt thanks on behalf of the ACOEL – and I would be doing that even if not instructed to do so!

Andy Field

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Tuesday, May 15, 2018 8:18 PM

To: Field, Andrea

Subject: Re: ACOEL Interview

Hi Andy. Yes, Friday is still good. If you are available late tomorrow afternoon, maybe I can call you then?

On May 15, 2018, at 5:20 PM, Field, Andrea afield@hunton.com> wrote:

Are we still a "go" for the interview this Friday, May 18? And if so, will you have time (no more than 10 minutes) between now and then to go over potential questions that you feel comfortable addressing? Thanks.

Andy Field

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, April 26, 2018 10:45 AM

To: Field, Andrea Subject: Tomorrow

Hi Andy. I had planned to come to your office tomorrow for the American College of Environmental Lawyers interview. But, I now will be out of town – need to travel to Memphis to take care of some family business. I still have time tomorrow, but will need to call in. Does that work for you? If so, what time is best? Also, I'd appreciate it if you could set up a call in number. Thanks.

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 2/27/2018 2:20:44 PM

To: Landin, David [dlandin@hunton.com]

Subject: Re: Today

I will call you.

```
Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404
> On Feb 27, 2018, at 8:59 AM, Landin, David <dlandin@hunton.com> wrote:
> Yes. Do you want to call me at
                                                  # or me call your cell?
                                         Ex. 6
> Sent from my iPhone
>> On Feb 27, 2018, at 7:07 AM, Wehrum, Bill <Wehrum.Bill@epa.gov> wrote:
>> David - Do you have time to talk at 5:15 or so this afternoon?
>>
>>
>> Bill Wehrum
>> Assistant Administrator
>> Office of Air and Radiation
>> U.S. Environmental Protection Agency
>> (202) 564-7404
```

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 5/23/2018 6:16:16 PM

To: Nolan, Robert M [robert.m.nolan@exxonmobil.com]

Subject: RE: ExxonMobil Press Release

Thanks Robert.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Nolan, Robert M [mailto:robert.m.nolan@exxonmobil.com]

Sent: Wednesday, May 23, 2018 11:08 AM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov>

Subject: ExxonMobil Press Release

Good morning Bill ... I thought you might find this of interest

Regard, Robert

Ex. 6

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 3/20/2018 10:53:36 PM

To: Landin, David [dlandin@hunton.com]
Subject: RE: Chesapeake Bay Foundation CBF

Do you know what issue(s) they want to raise with the Administrator?

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Landin, David [mailto:dlandin@hunton.com]

Sent: Tuesday, March 20, 2018 3:36 PM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov> **Subject:** Chesapeake Bay Foundation CBF

CBF is not a client. I have been active with it as a donor, but also know the CEO, Harry Lester, well from other events and as a friend. The president of CBF is Will Baker, whom I have met. He would like to meet with Admr. Pruitt and apparently tried unsuccessfully some time ago. Do you have a suggestion, whether as to Pruitt or to start with someone else who could cause a meeting with him to occur.

Thanks, David.

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 3/10/2018 12:21:48 AM

To: Boer, Tom [JTBoer@hunton.com]

Subject: Re: ELI

Thanks Tom. Not sure I will be in SF anytime soon. But, maybe we can get together next time you are in DC.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Mar 9, 2018, at 2:29 PM, Boer, Tom <fTBoer@hunton.com> wrote:

Bill, you've been "promoted" to having your e-mail quarantined by my Outlook. So apologies for the slow response. I thought the meeting was fine, although I did have to leave about 10 minutes early and it sounds like the questioning may have gotten more animated after my departure.

I hope you're doing well and we have a chance to catch up over coffee at some point.

Best, Tom

<image001.jpg>

Tom Boer

Partner

jtboer@hunton.com

Ex. 6

Hunton & Williams LLP 50 California St., Suite 1700 San Francisco, CA 94111 hunton.com

This communication is confidential and is intended to be privileged pursuant to applicable law. If the reader of this message is not the intended recipient, please advise by return ernail immediately and then delete this message and all copies and backups thereof.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Wednesday, March 07, 2018 4:04 PM

To: Boer, Tom Subject: ELI Hi Tom. What did you think of the ELI meeting today? I thought it was interesting.

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 3/9/2018 11:15:43 PM

To: Gill, Julia Zemnick [jgill@hunton.com]

Subject: RE: Saturday

Thanks again.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Friday, March 9, 2018 5:22 PM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov>

Subject: RE: Saturday

Bill,

I am having a cart left for you in case you need it to take everything down to your car.

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, March 09, 2018 4:35 PM

To: Gill, Julia Zemnick **Subject:** Re: Saturday

Thanks Julia.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Mar 9, 2018, at 4:26 PM, Gill, Julia Zemnick < igill@hunton.com > wrote:

Bill,

Ex. 6

From: Wehrum, Bill [mailto:Wehrum,Bill@epa.gov]

Sent: Friday, March 09, 2018 3:56 PM

To: Gill, Julia Zemnick **Subject:** RE: Saturday



Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

From: Gill, Julia Zemnick [mailto:jgill@hunton.com]

Sent: Thursday, March 8, 2018 5:36 PM **To:** Wehrum, Bill < <u>Wehrum, Bill@epa.gov</u>>

Subject: RE: Saturday

Hi Bill,

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Thursday, March 08, 2018 12:56 PM

To: Gill, Julia Zemnick **Subject:** Saturday

Ex. 6

| Message | |
|---------|--|
|---------|--|

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 2/28/2018 8:38:32 PM

To: Weisiger, Katherine [kweisiger@hunton.com]

Subject: Re: Cash Balance Plan Form Missing

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Feb 28, 2018, at 3:19 PM, Weisiger, Katherine <<u>kweisiger@hunton.com</u>> wrote:

Ex. 6

Katherine

<image003.jpg>

Katherine B. Weisiger

Retirement Manager kweisiger@hunton.com

P **Ex. 6**

Hunton & Williams LLP Riverfront Plaza, East Tower 951 East Byrd Street Richmond, VA 23219 hunton com

<Wehrum Spousal Consent Form.pdf>

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent:

3/30/2018 4:55:29 PM

To:

Stanko, Joseph [jstanko@hunton.com]

Subject: Re: Today

I'm hung up with SP. Hope to be done soon. We can reload if you don't want to hang out.

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Mar 30, 2018, at 12:04 PM, Wehrum, Bill < Wehrum. Bill@epa.gov> wrote:

I'll be meeting with SP in the meantime. Will let you know if I get hung up.

From: Stanko, Joseph [mailto:jstanko@hunton.com]

Sent: Friday, March 30, 2018 11:17 AM **To:** Wehrum, Bill < Wehrum, Bill@epa.gov>

Subject: RE: Today

1 is fine

<image001.jpg>

Joseph Stanko

Partner

jstanko@hunton.com Ex.6

bio vCard

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 hunton.com

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Friday, March 30, 2018 11:05 AM

To: Stanko, Joseph **Subject:** Today

Joe – Can we push to 1:00, or maybe coffee later in the day?

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 4/26/2018 3:32:44 PM

To: Field, Andrea [afield@hunton.com]

Subject: RE: Tomorrow

Thanks Andy. As usual, my folks are way ahead of me. Look forward to seeing you in May.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

----Original Message----

From: Field, Andrea [mailto:afield@hunton.com]

Sent: Thursday, April 26, 2018 11:13 AM To: Wehrum, Bill <Wehrum.Bill@epa.gov>

Subject: Re: Tomorrow

Bill -

Isabel contacted me yesterday to say you were traveling this week and that your schedule might be up in the air. Although she didn't flat out ask or direct us to change the date of the interview, I think she breathed a sigh of relief when we suggested moving the interview to some time in May.

Based on your schedule, we chose May 18, from 11-noon. If you come to our office that day, we might be able to squeeze in a quick post-interview lunch with the gang before you have to rush back to EPA.

Now please return to what you are dealing with in Memphis, and I look forward to seeing you in a few weeks (and perhaps we can have a very short prep call ahead of time to set up a list of issues you'd most like to cover during the interview).

Andy

On Apr 26, 2018, at 10:44 AM, Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:

Hi Andy. I had planned to come to your office tomorrow for the American College of Environmental Lawyers interview. But, I now will be out of town — need to travel to Memphis to take care of some family business. I still have time tomorrow, but will need to call in. Does that work for you? If so, what time is best? Also, I'd appreciate it if you could set up a call in number. Thanks.

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 3/19/2018 9:51:15 PM

To: Murdock, Eric [emurdock@hunton.com]

Subject: Re: Thanks

```
Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

> On Mar 19, 2018, at 5:47 PM, Murdock, Eric <emurdock@hunton.com> wrote:
>
> Bill,

Ex. 6

> Thanks,
> Eric
> ----Original Message----
> From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
> Sent: Monday, March 12, 2018 7:43 AM
> To: Murdock, Eric
> Subject: Thanks
> Ex. 6
```

> Bill Wehrum

> Assistant Administrator

> Office of Air and Radiation

> U.S. Environmental Protection Agency

> (202) 564-7404

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 11/28/2017 3:33:53 AM **To**: cknauss@hunton.com

Subject: Fwd: Lunch

Туро ...

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

Begin forwarded message:

From: Wehrum.Bill@epa.gov

Date: November 27, 2017 at 10:32:11 PM EST

To: mjaber@hunton.com, afield@hunton.com, hnickel@hunton.com, cknauss@hinton.com

Subject: Lunch

Ex. 6

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 11/20/2017 12:43:06 AM

To: Barnes, Felicia [FBarnes@hunton.com]

Subject: Re: Lunch?

Hi Felicia. I will get back to you tomorrow. As you might imagine, I need to make sure I schedule things in conjunction with my front office team.

Sent from my iPhone

On Nov 19, 2017, at 12:30 PM, Barnes, Felicia < FBarnes@hunton.com > wrote:

Do any of these days work for lunch?

December 8 (Friday)
December 12 (Tuesday)
December 13 (Wednesday)
December 14 (Thursday)

-Felicia

<image001.jpg>

Felicia Barnes

Associate

fbarnes@hunton.com p Ex. 6 bio

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 hunton.com

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Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
From:
                           (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]
Sent:
                           1/4/2018 2:33:15 PM
                          Nickel, Henry [hnickel@hunton.com]
To:
Subject:
                          RE: Today
Great. Thanks Henry.
 ----Original Message----
From: Nickel, Henry [mailto:hnickel@hunton.com]
Sent: Thursday, January 4, 2018 9:25 AM
To: Wehrum, Bill <Wehrum.Bill@epa.gov>
Subject: Re: Today
                                 Ex. 6
_____
Sent from my iPad
On Jan 4, 2018, at 7:56 AM, Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov>> wrote:
Henry -
                                                                                                          Ex. 6
Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
 (202) 564-7404
On Jan 2, 2018, at 1:00 PM, Nickel, Henry <a href="mailto:hnickel@hunton.com">hnickel@hunton.com</a> wrote:
That works,
Sent from my iPad
On Jan 2, 2018, at 4:41 PM, Wehrum, Bill
<Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>> wrote:
                                                              Ex. 6
 ----Original Message----
From: Nickel, Henry [mailto:hnickel@hunton.com]
Sent: Tuesday,
                               January 2, 2018 11:39 AM
To: Wehrum, Bill <Wehrum.Bill@epa.gov<mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>>
Subject: Re: Today
   Ex. 6
Sent from my iPad
On Jan 2, 2018, at 4:34 PM, Wehrum, Bill
<Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><</p>
wrote:
Ex. 6
 ----Original Message----
From: Nickel, Henry [mailto:hnickel@hunton.com]
Sent: Tuesday, January 2, 2018 8:55 AM
To: Wehrum, Bill <a href="Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehr
Subject: Re: Today
Will do, and Happy New Year!!
Sent from my iPhone
On 2 Jan 2018, at 13:52, Wehrum, Bill
<Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>>
wrote:
```

Ex. 6

Bill Wehrum
Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
(202) 564-7404

On Jan 2, 2018, at 8:44 AM, Nickel, Henry <hnickel@hunton.com<mailto:hnickel@hunton.com><mailto:hnickel@hunton.com><mailto:hnickel@hunton.com>> wrote:

Ex. 6

Sent from my iPad

On Jan 2, 2018, at 1:31 PM, Wehrum, Bill <mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov><mailto:Wehrum.Bill@epa.gov>> wrote:

Ex. 6

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 11/20/2017 10:31:58 PM

To: Barnes, Felicia [FBarnes@hunton.com]

Subject: Ex. 6

Ex. 6

From: Barnes, Felicia [mailto:FBarnes@hunton.com]

Sent: Monday, November 20, 2017 4:51 PM **To:** Wehrum, Bill < Wehrum.Bill@epa.gov>

Subject: Ex. 6

Ex. 6

From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]

Sent: Monday, November 20, 2017 4:48 PM

To: Barnes, Felicia
Subject: Ex. 6

Ex. 6

From: Barnes, Felicia [mailto:FBarnes@hunton.com]

Sent: Sunday, November 19, 2017 12:29 PM **To:** Wehrum, Bill < Wehrum. Bill@epa.gov>

Subject: Ex. 6

Ex. 6

-Felicia

HUNTON WILLIAMS

Felicia Barnes

Associate

fbarnes@hunton.com

Ex. 6

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037 hunton.com

From: Wehrum, Bill [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=33D96AE800CF43A3911D94A7130B6C41-WEHRUM, WIL]

Sent: 12/22/2017 4:39:47 PM

To: Richard Moskowitz [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=user2443f1e7]

Subject: Re: Meeting Request

Thanks Rich. I will make sure they follow up. Hope you have a happy holiday too.

Bill Wehrum Assistant Administrator Office of Air and Radiation U.S. Environmental Protection Agency (202) 564-7404

On Dec 22, 2017, at 11:36 AM, Richard Moskowitz <RMoskowitz@afpm.org> wrote:

Hi Bill,

Just following up on this to let you know I haven't heard from your scheduler. If you'd like me to follow up with them directly, let me know. In the meantime, I hope you and your wife have a very happy holiday.

Thanks,

Richard Moskowitz General Counsel

American
Fuel & Petrochemical
Manufacturers
1667 K Street NW
Suite 700
Washington, DC 20006
Ex. 6

rmoskowitz@afpm.org

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From: Wehrum, Bill [mailto:Wehrum.Bill@epa.gov]
Sent: Wednesday, December 6, 2017 7:40 AM
To: Richard Moskowitz <RMoskowitz@afpm.org>

Subject: RE: Meeting Request

Hi Rich. Happy to meet. I'll send this along to my scheduling folks. They will reach out to you to find a suitable time.

From: Richard Moskowitz [mailto:RiMoskowitz@afpm.org]

Sent: Wednesday, December 6, 2017 7:38 AM **To:** Wehrum, Bill <<u>Wehrum, Bill@epa.gov</u>>

Subject: Meeting Request

Good morning Bill,

I hope you're settling in nicely. AFPM would like to schedule a meeting with you and your team to discuss state ZEV mandates. Would you please reply to this email with some times that work for you and your team?

Thanks, -Rich

Richard Moskowitz General Counsel

American
Fuel & Petrochemical
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1667 K Street NW
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Washington, DC 20006
Ex. 6

rmoskowitz@afpm.org

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