

Ongoing Improvements to Implementing the Clean Air Act

ERM and Bracewell Webinar series: Air Quality Policy Changes in the US

June 14, 2018

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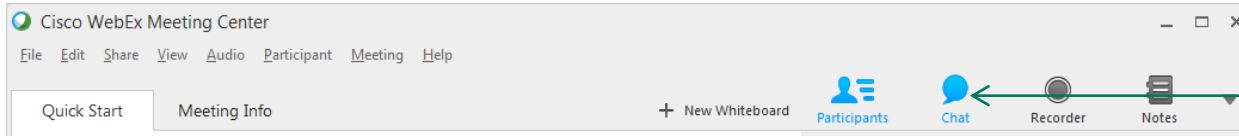
The business of sustainability

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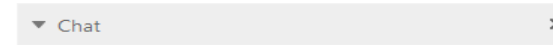
Welcome

- This presentation will be recorded and all who registered will receive a follow-up email containing a link to the presentation within a week.
- Participants can ask questions throughout the presentation using the WebEx chat function and they will be answered during the last 15 minutes of the webinar in the order that they were received.

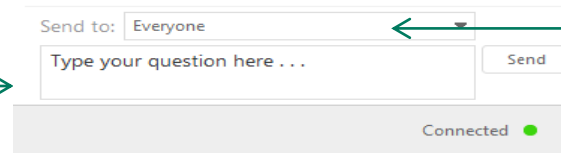


Click on chat

- Send your question to “Everyone” so that those answering the questions will be able to see them.



WebEx Chat box



Select “Everyone”

Type your question and send

Today's Webinar

ERM & Bracewell Webinar

Ongoing Improvements to Implementing the Clean Air Act



Mark Garrison
ERM



Toby Hanna
ERM



Jeff Holmstead
Bracewell



Dave Jordan
ERM



Ken Weiss
ERM

- Changing Roles: EPA and States
- Cost Benefit ANPRM
- Setting & Implementing NAAQS
- Air Dispersion Modeling Improvements
- Crystal Ball & Recommendations

Changing Roles: EPA and States

EPA Administrator Pruitt's 3 Overarching Goals

01
Refocus the Agency back to its core mission

02
Restore power to the states through cooperative federalism

03
Lead the EPA through improved process and adhere strictly to the rule of law

“States play an enormous role, and we will work with them as partners, not adversaries, to solve the environmental challenges we face today.”

NEI vs. NCI

National Enforcement Initiatives (NEI)

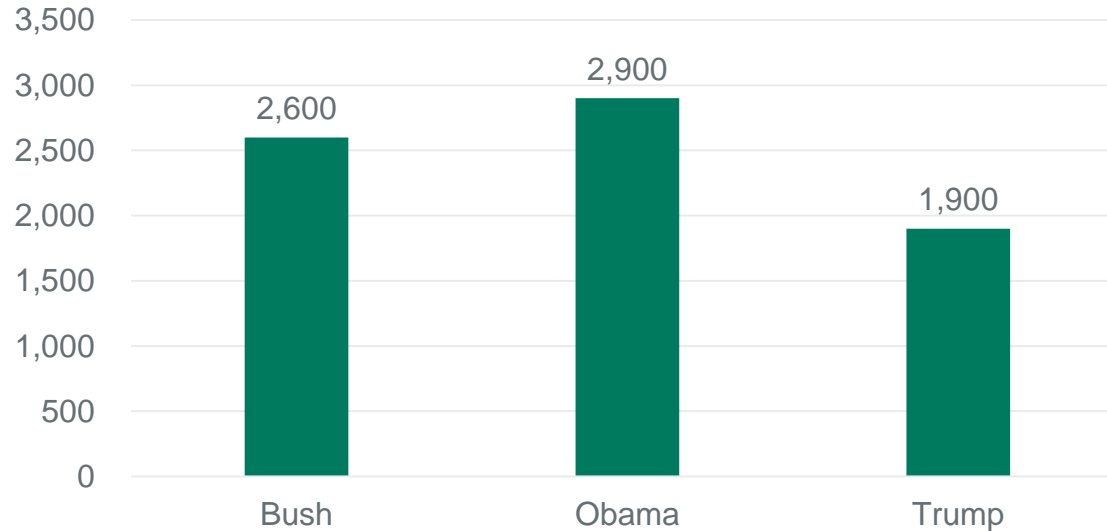


National Compliance Initiatives (NCI)

NEI	NCI
Enforcement Cases	Compliance Tools (voluntary self audits, compliance advisories, engaging trade associations)
Fines to prevent competitive advantage gained by breaking rules	Incentives to comply
EPA priorities	Informed by discussion w/ states

EPA Enforcement Cases Down >34% in 2017

Number of Enforcement Cases in first 266 Days in Office

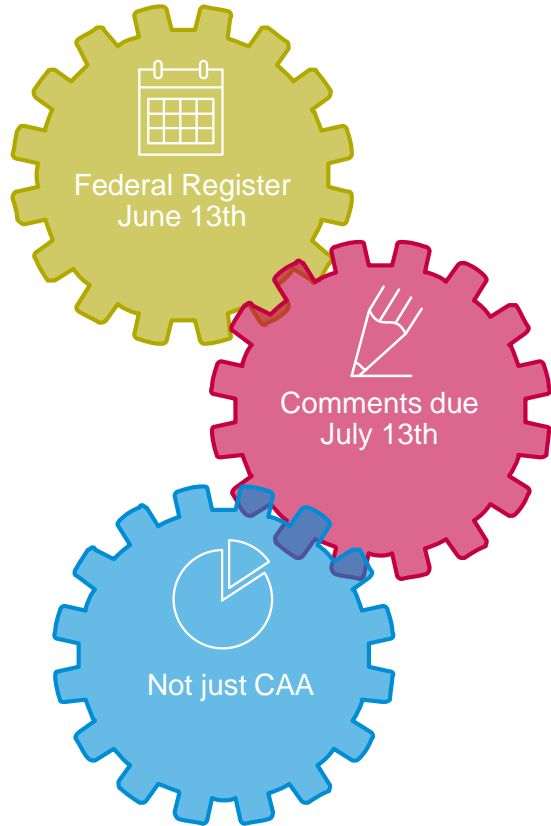


Source: New York Times article "Under Trump EPA...", 12/10/17

June 7, 2018

Cost Benefit ANPRM

Cost Benefit – The ANPRM

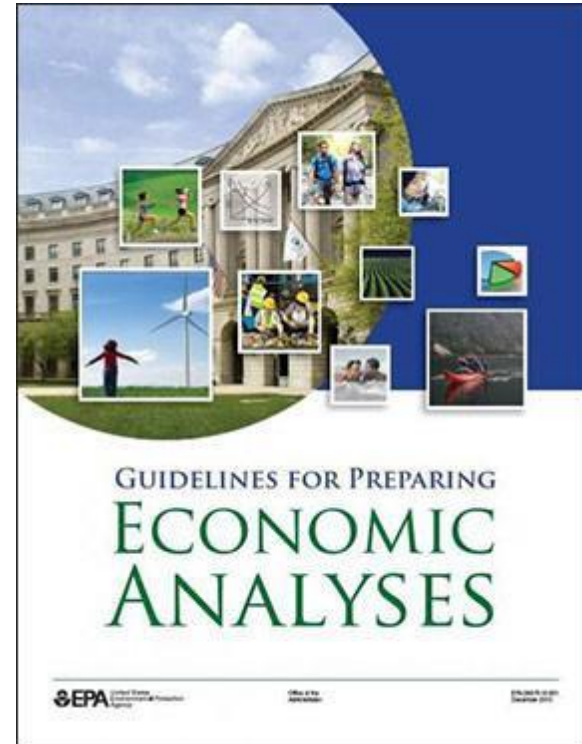


“soliciting comment on whether and how EPA should promulgate regulations that provide a consistent and transparent interpretation relating to the consideration of weighing costs and benefits in making regulatory decisions in a manner consistent with applicable authorizing statutes.”

“EPA is also soliciting comment on whether and how these regulations, if promulgated, could also prescribe specific analytic approaches to quantifying the costs and benefits of EPA regulations.”

The Role of Co-Benefits & Guidance vs. Rules

Year	RIAs for Final Rules Not Targeting Ambient PM _{2.5}	PM Co-Benefits Are >50% of Total	PM Co-Benefits Are Only Benefits Quantified
1997	Ozone NAAQS (.12 1hr=>.08 8hr)	×	
1997	Pulp & Paper NESHAP		
1998	NOx SIP Call & Section 126 Petitions		
1999	Regional Haze Rule	×	
1999	Final Section 126 Petition Rule	×	
2004	Stationary Reciprocating Internal Combustion Engine NESHAP	×	
2004	Industrial Boilers & Process Heaters NESHAP	×	×
2005	Clean Air Mercury Rule	×	
2005	Clean Air Visibility Rule/BART Guidelines	×	
2006	Stationary Compression Ignition Internal Combustion Engine NSPS		
2007	Control of HAP from mobile sources	×	×
2008	Ozone NAAQS (.08 8hr =>.075 8hr)	×	
2008	Lead (Pb) NAAQS	×	
2009	New Marine Compress'n-Ign Engines >30 L per Cylinder	×	
2010	Reciprocating Internal Combustion Engines NESHAP - Compression Ignition	×	×
2010	EPA/NHTSA Joint Light-Duty GHG & CAFÉ Standards		
2010	SO2 NAAQS (1-lr, 75 ppb)	×	>99.9%
2010	Existing Stationary Spark Compression Ignition Engines NESHAP	×	×
2011	Industrial, Comm. and Institutional Boilers NESHAP for Area Sources	×	×
2011	Indus'l, Comm'l, Institutional Boilers & Process Heaters for Major Sources NESHAP	×	×
2011	Comm'l & Indus'l Solid Waste Incineration Units NSPS and Emission Guidelines	×	×
2011	Control of GHG from Medium & Heavy-Duty Vehicles		
2011	Reconsideration of Ozone NAAQS	×	
2011	Utility Boiler MACT Rule ("MATS")	×	≥99%
2011	Sewage Sludge Incineration Units NSPS & Emission Guidelines	×	×
2012	Petroleum Refineries NSPS Subpart Ja	×	×
2012	EPA/NHTSA Joint Light-Duty GHG & CAFÉ Standards for Model Years 2017+		
2012	Reconsideration NESHAP Indus'l, Comm'l, and Institutional Boilers & Process Heaters at Major Sources	×	×
2013	Reconsideration Existing Stationary CI Engines NESHAP	×	×
2013	Reconsideration Existing Stationary SI RICE NESHAP	×	×



Setting & Implementing NAAQS

May 9, 2018 Back to Basics NAAQS Memo

“President Donald J. Trump’s Administration will reform NAAQS implementation to provide States with a more efficient process and to promote economic growth”

White House April 12, 2018 press release

“The principles laid out in this memorandum will reform the process for setting national air quality standards in a manner consistent with cooperative federalism and the rule of law...”

Administrator Pruitt May 10, 2018 press release



E. SCOTT PRUITT
ADMINISTRATOR

May 9, 2018

MEMORANDUM

SUBJECT: Back-to-Basics Process for Reviewing National Ambient Air Quality Standards

FROM: E. Scott Pruitt

TO: Assistant Administrators

The Role of Economics in NAAQS

CASAC “shall advise the Administrator of any adverse public health, welfare, social, *economic, or energy effects* which may result from various strategies for attainment and maintenance of such national ambient air quality standards.

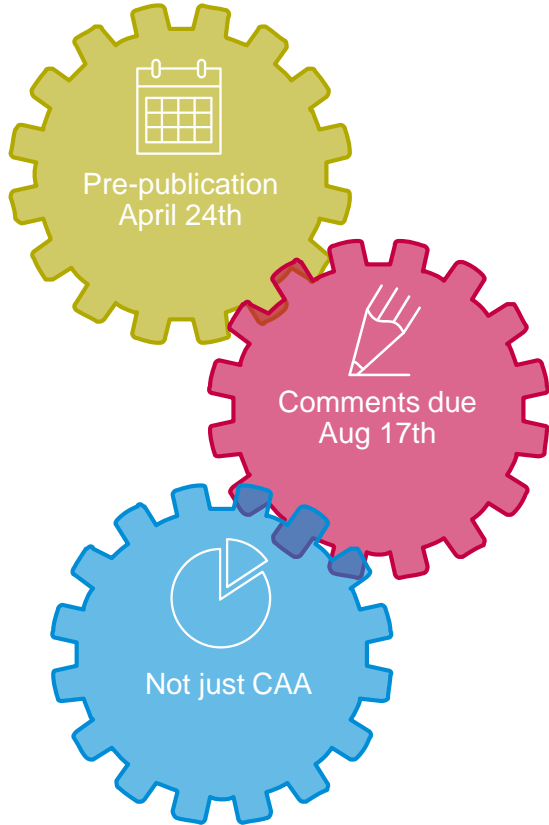
May 9, 2018 EPA Memo

vs.

“...Section 109(b) does not permit the Administrator to consider implementation costs in setting NAAQS.”

Supreme Court (2001) Whitman vs American Trucking Associations

Strengthening Transparency in Regulatory Science



1

Use best available science, but...

2

It must be publicly available

3

Can EPA use confidential medical data to support NAAQS development?

Key NAAQS Issues to Follow

01

Ozone designations

02

70 ppb ozone reconsideration

03

SO₂ NAAQS retained

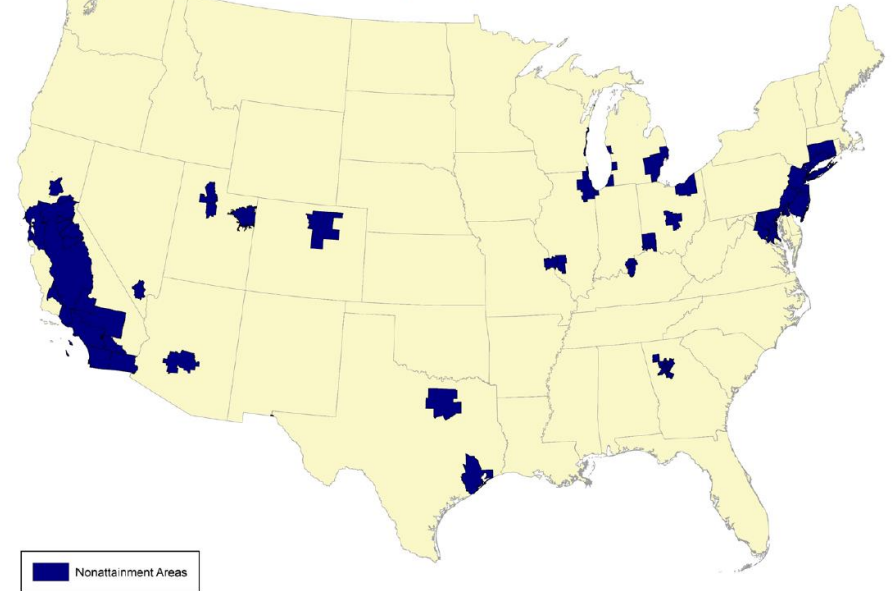
04

Transport: good neighbor, Section 126

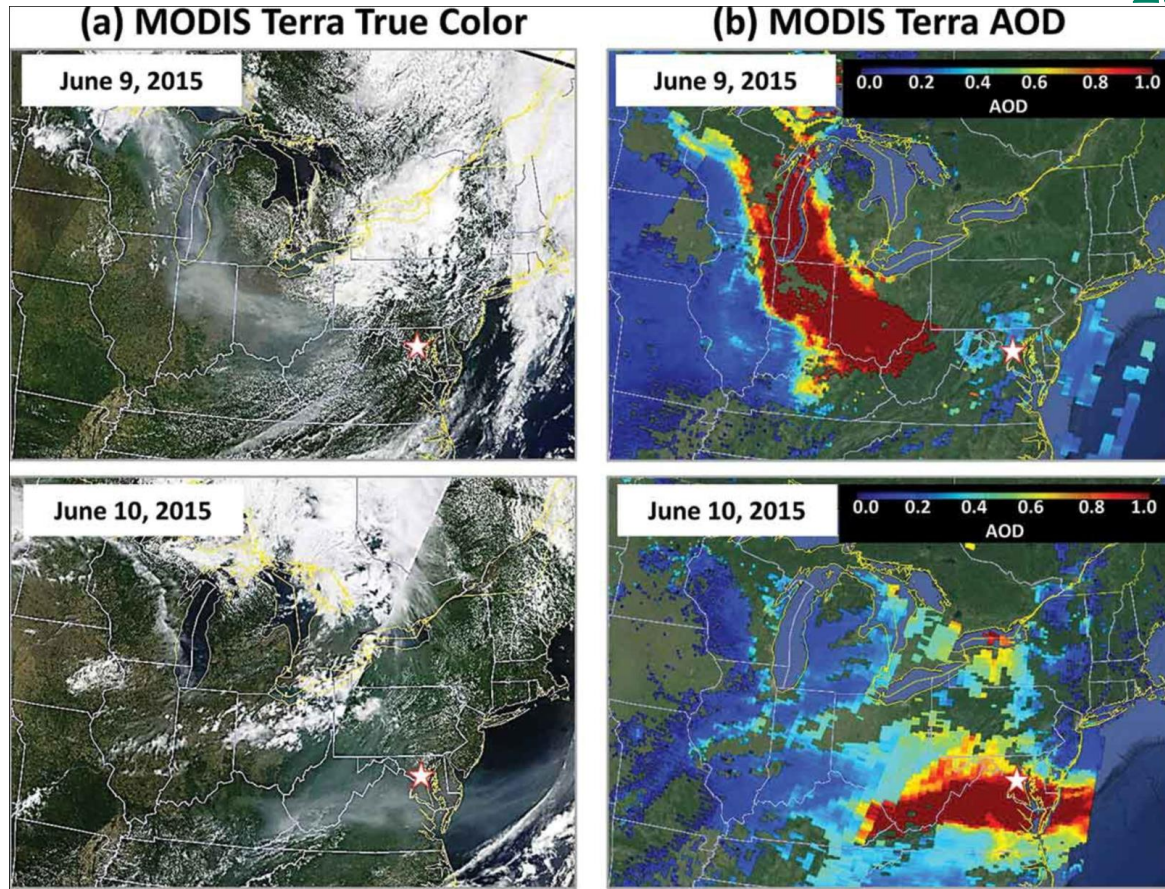
05

Exceptional events

Nonattainment Area Designations for the 2015 Ozone Standards
April 30, 2018



Where There's Smoke, There's PM_{2.5}!



EPA's NAAQS Objectives

EPA's Clean Air Priority Goal FY2018-2022: Reduce Number of Nonattainment Areas

FISCAL YEAR	GOAL (from 166 areas)*	ACTUAL (thru FY18 Q2)
FY2018	155	163
FY2019	146	
FY2020	144	
FY2021	140	
FY2022	101	

* The baseline of 166 is the number of areas designated nonattainment for non-revoked standards as of 10/1/2017 (start of 1st quarter of FY 2018).



Air Dispersion Modeling Improvements

The Path to Improvements in Model Application

Ambient Air

April 5, 2018 Presentation by EPA's Anne Marie Woods

Ambient Air Guidance

- EPA defines “ambient air” as “that portion of the atmosphere, external to buildings, to which the general public has access” (40 CFR 50.1(e))
- EPA’s longstanding policy for implementing ambient air for PSD purposes was stated in a 1980 Costle letter, “the atmosphere over land that is owned or controlled by the source and to which public access is precluded by a fence or other physical barriers”
- Subsequent guidance provided over the years by EPA to recommend how to apply 1980 policy statement for specific situations
- We are evaluating several key terms associated with the definition including: “general public”, “access” and “building” to determine where additional flexibility may be appropriate
- EPA is anticipating issuing guidance in Spring 2018



Update: June 5, 2018 Presentation by EPA's Dan deRoeck:
now anticipating guidance by Summer 2018

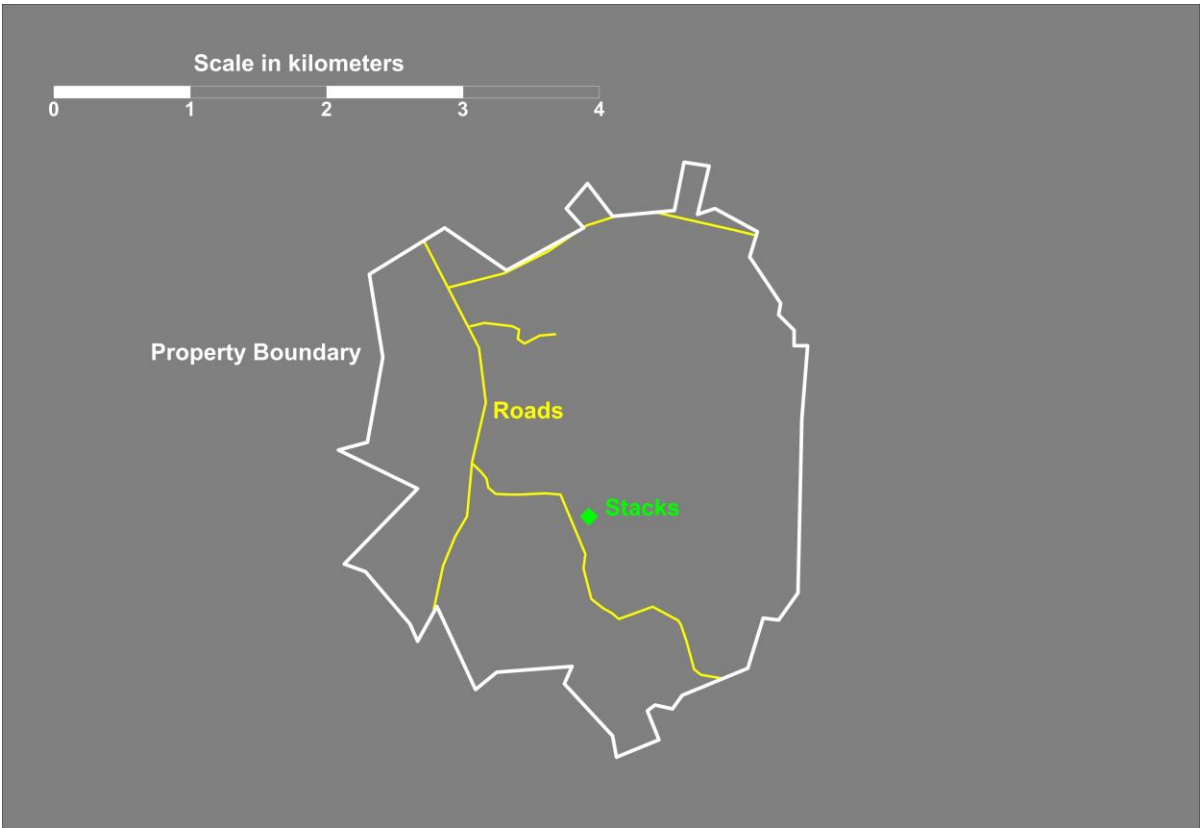
Cumulative Modeling for PSD sources

June 11, 2018 EPA comment on PSD application

“...DEP is reminded that recent revisions to Appendix W – Guideline on Air Quality Models allow applicants to use emission rates that are reflective of actual operating levels. Section 8.2.2 (c) reads:”

“[A]s part of a cumulative impact analysis, Table 8-2 allows for the model user to account for actual operations in developing the emissions inputs for dispersion modeling of nearby sources, while other sources are best represented by air quality monitoring data.”

What's the Dilemma With Ambient Air?



Why is Cumulative Modeling Such a Problem?

If a PSD project has modeled impacts >SIL

01

Modeling “nearby” sources

- Lengthy, time-consuming analysis
- Expose other sources to scrutiny (must show <SIL on predicted violations)

02

If the PSD project is a modification

- Expose other facility sources to scrutiny and possibly a need for additional controls

... and What Can be Done?

From a June 5, 2018 EPA Presentation:

The 2017 update to Tables 8-1 and 8-2 of EPA's Guideline allow for more flexibility to appropriately characterize background concentrations as part of a cumulative modeling analysis.

- Under 2005 Guideline, model applications tended to be overly conservative by modeling most, if not all, sources within 50 km or nonattainment area at maximum allowable emissions (and often added monitored background too). Did not appropriately represent air quality concentrations with few implications under older NAAQS but did so under 1-hour NAAQS for SO₂ and NO₂
- Under the 2017 Guideline, model applications are expected to more appropriately represent air quality concentrations within a nonattainment areas (for SIPs) and in proximity to new/modifying sources (for permits). This allows for a more realistic characterization of air quality to inform CAA programs

What does it all mean?

Recommendations



Questions



Air Quality Policy Changes Webinar Series

February 2018
Ending the
MACT “once in,
always in” Policy

June 2018
Singles and
Doubles: What’s
Going on with NSR?

June 2018
Ongoing
Improvements on
Implementing the
Clean Air Act

September 2018
Updates on new
and ongoing policy
changes –
**more details
coming soon!**

Thank You

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