

Air & Waste Management Association  
Florida Section  
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Tallahassee, Florida

Hopping Green & Sams

# Air Quality - Policy and Permitting

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## Robert A. Manning

**A native Floridian, Robert Manning has been practicing environmental law with Hopping Green & Sams since 1994. Robert's practice focuses primarily on air quality-related issues, including policy development, legislation, rulemaking, permitting and enforcement. Robert is past Chair of the Florida Bar's Environmental and Land Use law Section and the Florida Section of the Air and Waste Management Association.**



# Agenda

- **GHGs**
  - **CPP and ACE**
  - **Florida GHG Case**
- **Open Burning**
- **CSAPR Update**
- **SSM SIP Call**

# GHGs

- **Clean Power Plan (W.Va. v. EPA, D.C. Circuit)**
  - **Sept. 17, 2019 – Order dismissing challenges as moot**

# GHGs

- **Affordable Clean Energy (ACE) Rule (ALA v. EPA, D.C. Circuit)**
  - **Final Rule (FR July 8, 2019)**
    - **Repeals CPP**
    - **Creates Emission Guidelines for existing coal-fired EGUs**
    - **Revises 111(d) implementing rules**

# GHGs

- **ACE Litigation**
  - **States, NGOs are challenging action**
  - **States, Industry have intervened in support of EPA**
  - **Competing Motions to Expedite and Hold Case in Abeyance**
  
- **Sept. 6<sup>th</sup>**
  - **Petition for Reconsideration**

# GHGs

- **Reynolds v. FL (Leon County Circ. Court)**
  - **Complaint filed April 16, 2018 (Amended Dec. 26, 2018)**
  - **Alleges violations of FL Constitution, Public Trust**
  - **State filed three Motions to Dismiss on Feb. 6, 2019**
  - **Plaintiffs and *Amici* responded**
  - **Awaiting hearing**



# OPEN BURING

- **Coffie v. Florida Crystals, et al., (S.D. FL)**
- **Complaint (Class Action) filed on June 4, 2019**
- **Tort claims regarding burning of cane fields**
  - **Nuisance, trespass, personal injury, decreased property value**

# CSAPR Update

- **Wisconsin v. EPA (D.C. Circuit)**
  - Sept. 13<sup>th</sup> decision – Remanded to EPA to fix timing issue  
– upheld the rest
- **Close-Out Rule (D.C. Circuit)**
  - Oct. 1<sup>st</sup> decision – vacated rule because EPA needs to fix timing issue in CSAPR Update Rule
- **Recent modeling regarding 2015 standard**
- **EPA approved Florida's SIP on February 15, 2019, regarding 2008 Standard**

# SSM SIP Call

- **FCG-EC v. EPA (D.C. Circuit)**
  - **Litigation in abeyance**
  - **EPA published actions regarding Texas (FR April 29) and NC (FR June 5)**
  - **Environmental Intervenors filing on May 24**



# How Air Regulation Works

## Division of Air Resource Management

### Florida Smog 1965

Tampa, FL  
Probably oil-fired boiler  
Temperature inversion  
No air regulation in Florida



October 1965



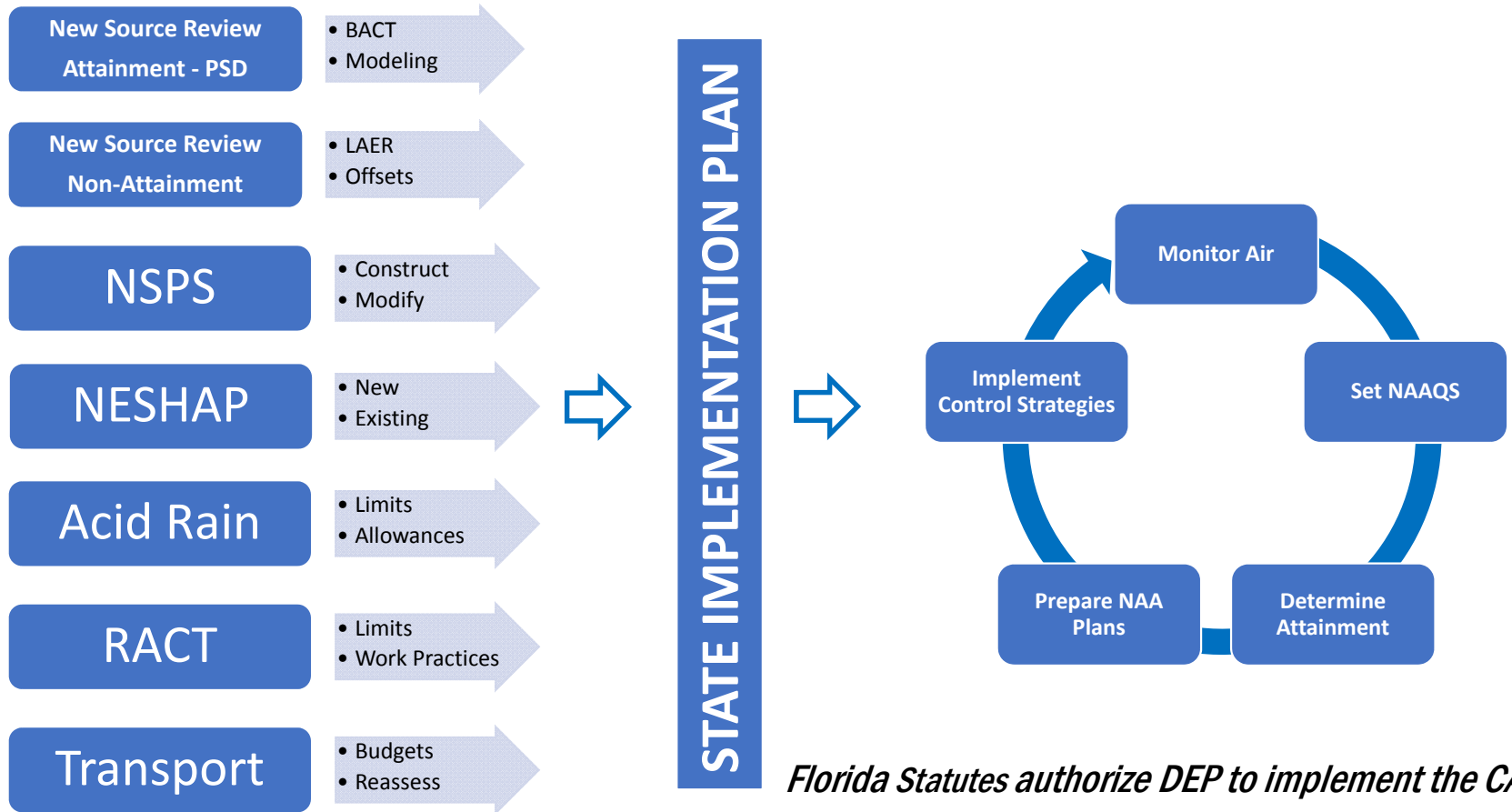
How Air Regulation Works





# CLEAN AIR ACT

## Air Regulation – Improving Air Quality



*Florida Statutes authorize DEP to implement the CAA.*



# Mobile Sources\*



- EPA sets standards for mobile sources - cars, trucks, and mobile equipment from tractors to jet skis
- EPA sets manufacturing requirements for everything from sound to Corporate Average Fuel Economy (CAFE) standards

*\* Nationally, mobile sources account for more than 75% of manmade emissions. In Florida, mobile sources now account for approximately 85%.*



# Air Regulation 2018 Permitted Facilities

- 3,614 Stationary Source Facilities
- 368 Title V Facilities
- 862 Minor Permitted Sources
- 2,384 Registrations for AGPs (18 source categories)

*For permitted stationary sources, about 95% of all criteria pollutant emissions come from 10% of the largest sources (Title V).*



# Permitting and Compliance

- **Permits identify applicable state and federal requirements, how to comply, and when to comply**
- **“Boots-on-the-ground” compliance activities provided by 6 regulatory districts and 8 local air programs**
- **On-site inspections and witnessing emissions tests**
- **Report reviews**
- **Outreach and regulatory presence**
- **Consistent and fair determinations**
- **Enforcement**





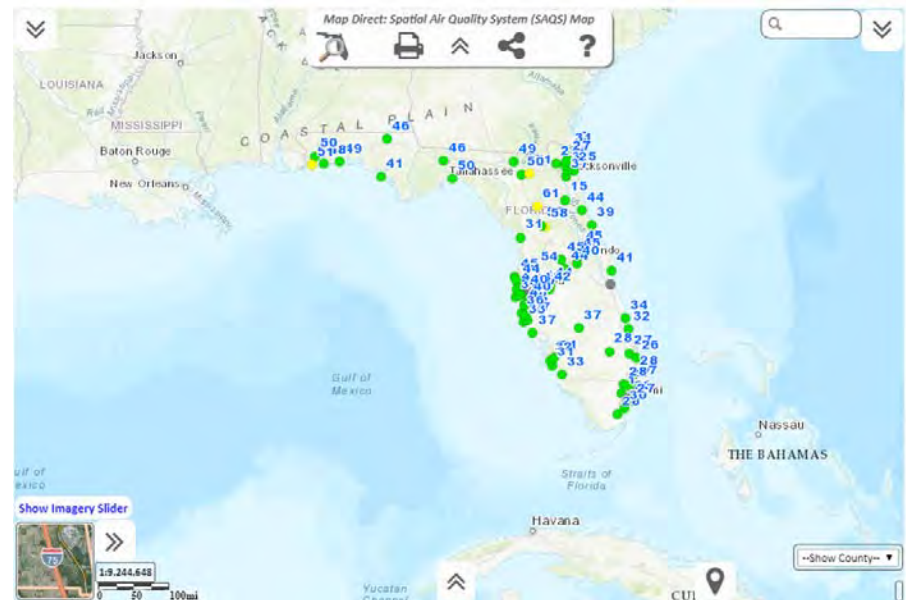
# National Ambient Air Quality Standards

- **CAA requires EPA to set NAAQS for 6 criteria pollutants:**
  - **Carbon Monoxide (CO) – 1971, last retained in 2011**
  - **Nitrogen Oxides (NO<sub>x</sub>) – 2010, last retained in 2019**
  - **Lead (Pb) – 2008, last retained in 2016**
  - **Particulate Matter (PM) – 2013, began review in 2018**
  - **Sulfur Dioxide (SO<sub>2</sub>) – 2010, last retained in 2019**
  - **Ozone (VOC) – 2015**
- **“Criteria” means a health-based criteria**
- **EPA reviews/ revises NAAQS every 5 years based on latest science**



# Got Data?

- Florida's ambient monitoring network is the foundation for air quality decisions - NAAQS
- Ambient air monitoring continuously provides data for the 99 monitoring sites across the state
- Data are available on Spatial Air Quality System (SAQS), as seen in this figure or in tabular form on the DARM webpage





# State Implementation Plans (SIP)

- **For each NAAQS, SIP describes attainment status for each county/area and how it will be maintained or attained**
  - Attainment Area - meeting standard
  - Nonattainment Area - not meeting standard
  - Unclassifiable Area - insufficient data to determine
  - Maintenance Area – NAA brought back into attainment
- **For areas not meeting a standard, CAA requires state to develop and implement a Nonattainment Area SIP approved by EPA**
- **Key requirements are: 1) emissions reduction strategies, and 2) modeling analyses to demonstrate changes will achieve attainment within 3 years**



# SIP Master



October 2019

Hastings Read(s)  
V and VI

How Air Regulation Works



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# Nassau County

- One large paper mill and one large sulfite mill began operating in Nassau County before CAA was written
- Both are large sources of SO<sub>2</sub>
- At the time original NAAQS were set, there was no SO<sub>2</sub> ambient monitoring in Nassau County
- A few years later, when modern monitoring was required, data showed that original NAAQS was met



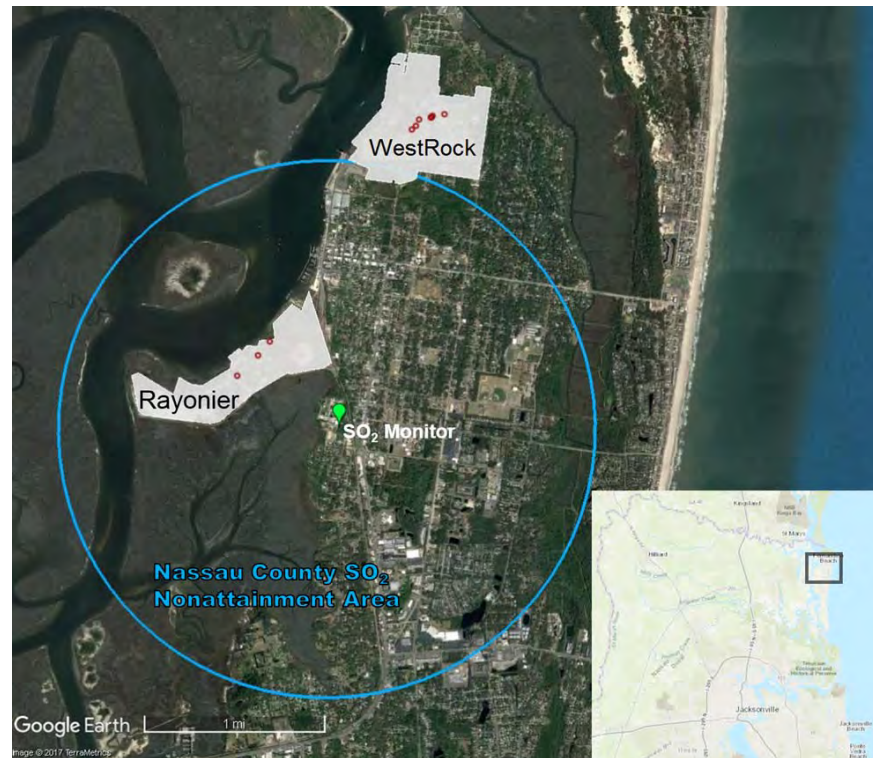


# Nassau County

- In 2010, EPA set a new and more stringent NAAQS for SO<sub>2</sub> - first time in almost 40 years
- Reduced standard from 140 ppb (24-hour average) to **75 ppb (1-hour average)**
- Data showed that the area did not meet new NAAQS



# Determining the Nonattainment Area





# Determining the Nonattainment Area

October 4, 2013, EPA designated a small area in Nassau County as nonattainment for the **1-hour SO<sub>2</sub>** NAAQS





# Evaluate Control Strategies

## **Rayonier Fernandina Beach Sulfite Pulp Mill (within NAA)**

- Improved vent gas scrubber (VGS)
- Reduced emissions limits: RB, PB, VGS
- Raised stack height of VGS

## **WestRock Fernandina Beach Mill (adjacent)**

- Improved recovery boiler operations, capped SO<sub>2</sub>
- Moved NCG from No. 5 PB to No. 7 PB and added a scrubber, reduced SO<sub>2</sub> by > 95%



# NAA Plan

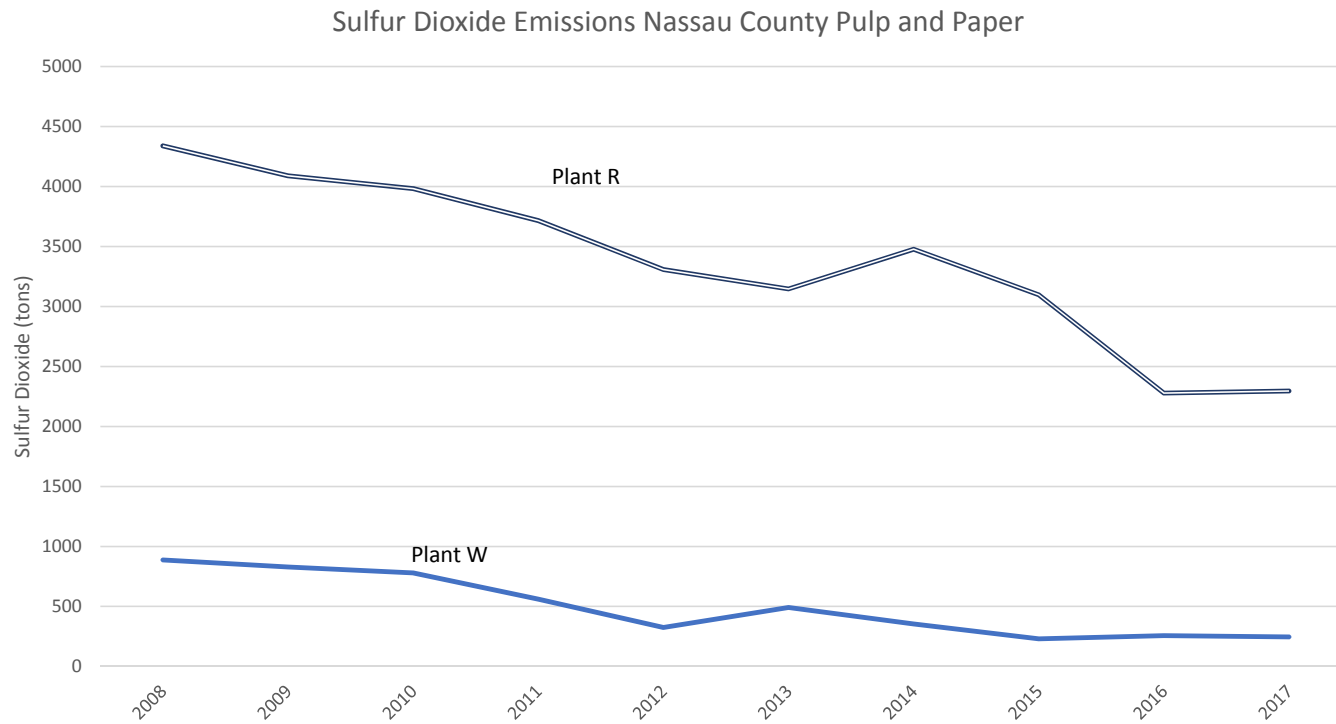
**DARM and the NED work with Rayonier and WestRock on meaningful changes, controls and permitting**

**DARM works with EPA Region 4 to develop a NAA plan**

- **April 12, 2012 – DEP issues Rayonier air construction permit to lower SO<sub>2</sub> emission limits**
- **January 2014 – Monitor now shows attainment**
- **January 9, 2015 – Department issues WestRock permit to lower SO<sub>2</sub> emission limits**
- **April 3, 2015 – Department submits NAA plan to EPA with modeling showing attainment using the lower permitted SO<sub>2</sub> limits**
- **Collect 3 years of data demonstrating attainment**
- **June 7, 2018 – After new SO<sub>2</sub> limits become effective, department submits to EPA a request to redesignate area to attainment**

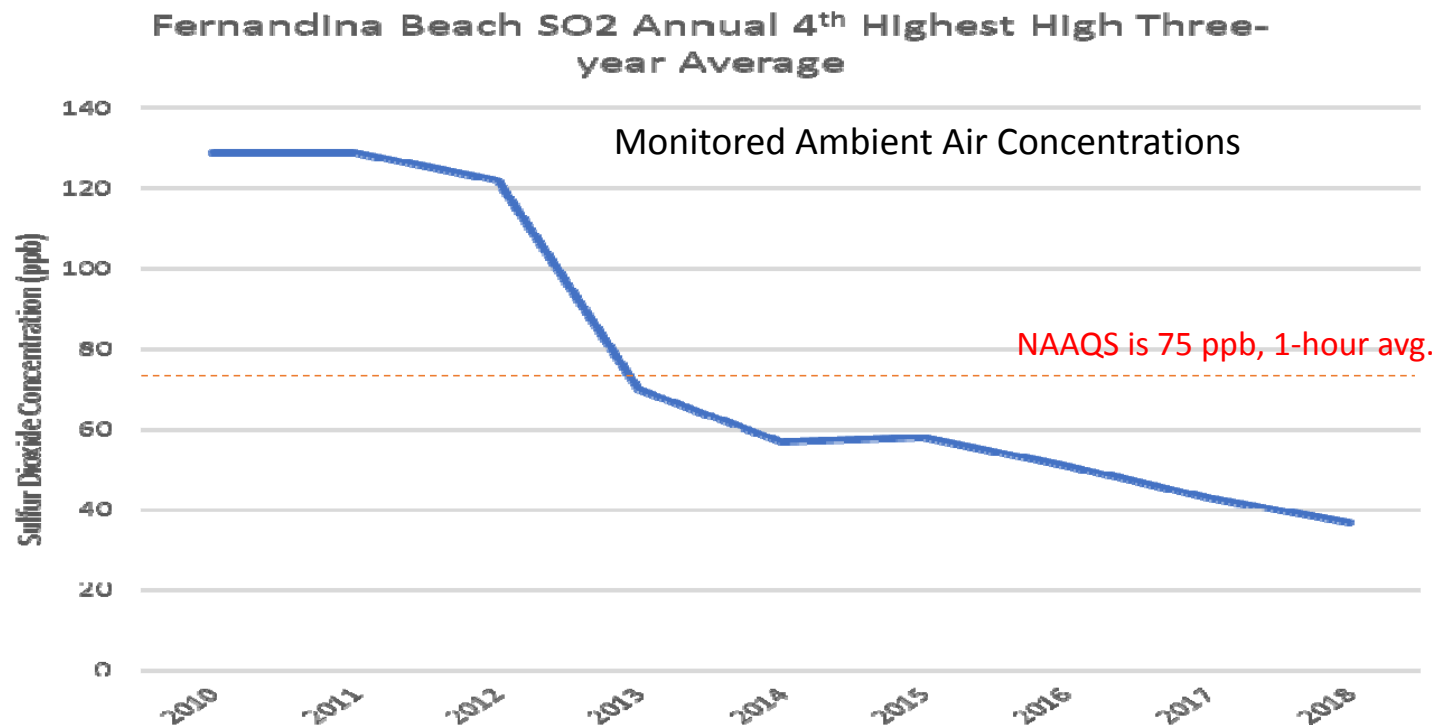


# Less Emissions, Lower Ambient Levels





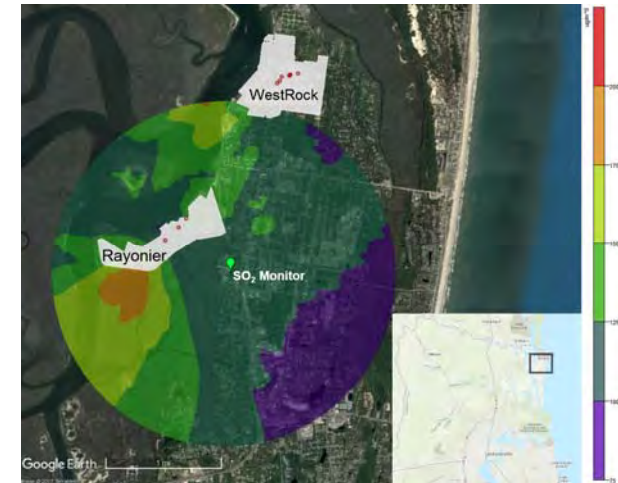
# Less Emissions, Lower Ambient Levels





# Nassau County Redesignation

- Completing the loop of making the NAAQS more stringent, designating the areas of the country into attainment or nonattainment with the new NAAQS
- Engaging affected businesses early, identifying control strategies, and conducting modeling to determine resulting impacts
- Developing a SIP to correct issue, collecting air quality data to show that the new NAAQS is met, and being redesignated to attainment for the new NAAQS



**On April 24, 2019, EPA published in the Federal Register that Nassau County was now meeting the new 1-hour SO<sub>2</sub> NAAQS!**



# Improving the Efficiency of FPL's AOR Preparation

**Kaitlyn Watkins**

Florida Power & Light

October 30, 2019



# DEP Annual Operating Report

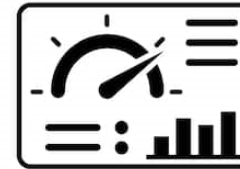
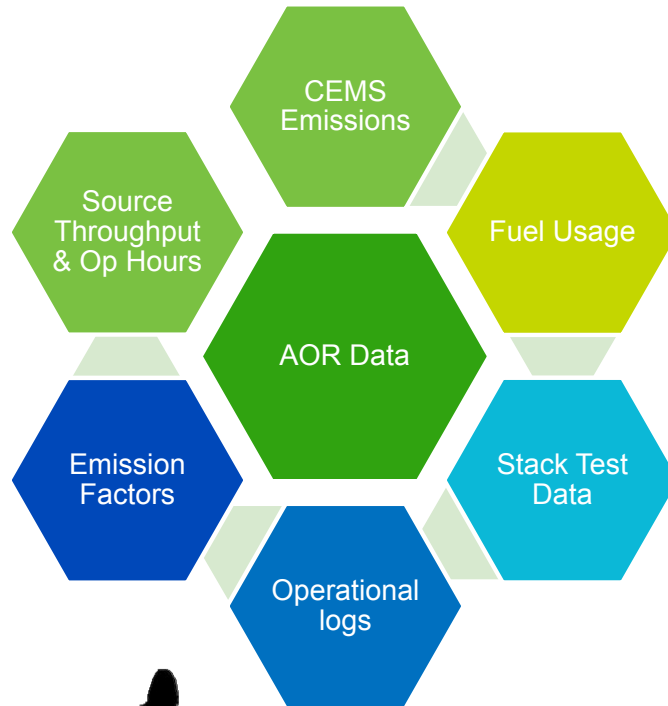
- ▶ **Annual Operating Report (AOR) required by FAC 62-210.370(3)**
  - » Title V Facilities
  - » Synthetic non-Title V sources
  
- ▶ **AOR summarizes operational and emission data**
  
- ▶ **All data must be submitted to FDEP through EAOR system**
  
- ▶ **Basic AOR process is typically comprised of two distinct processes:**
  - 1) Data is collected and prepared for each facility
  - 2) Data is entered into FDEP's software, the EAOR database

# Riviera Beach Energy Center





# Typical AOR – Data Inputs



# Lean Six Sigma



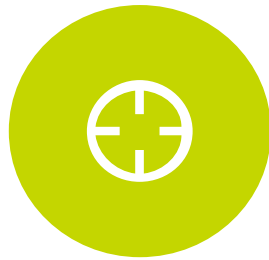
## Define

Describe the business opportunity



## Measure

Establish the current state of the process



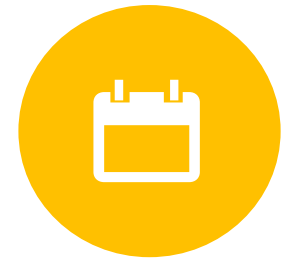
## Analyze

Isolate the significant root causes



## Improve

Develop ways to control the root causes



## Control

Set up controls for the future

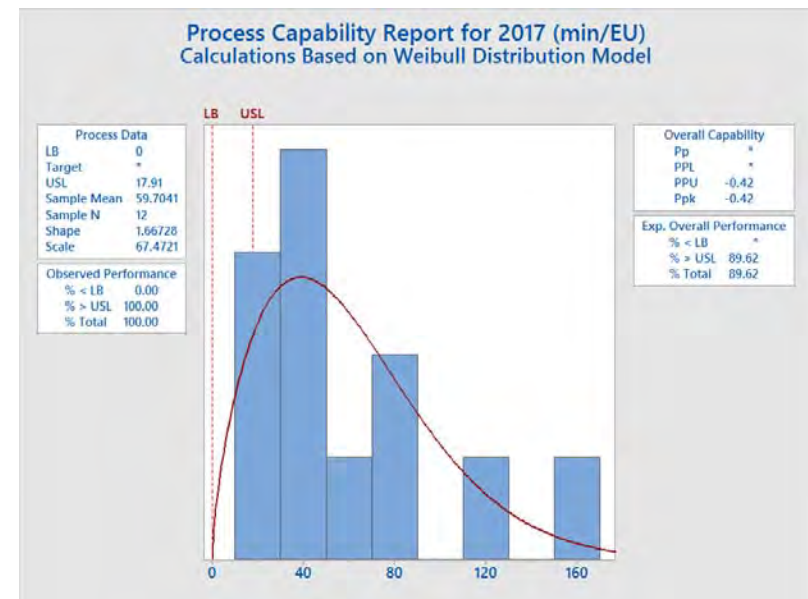
# How does the process perform?

## ► Evaluate Process

- » Determine if it is stable and in control?
- » Is process capable of meeting goal?

## ► Next step: Define process and review for potential root causes of undesirable outcomes

## Process Data Analysis Example



# Typical Root Cause Analysis



- 1 Use of Standardization
- 2 Source of Data Inputs
- 3 Source of Emission Factors

# Improvements

## ► Standardize Data

- » Centralized data collection
- » Use standard forms for test data

## ► Document Process

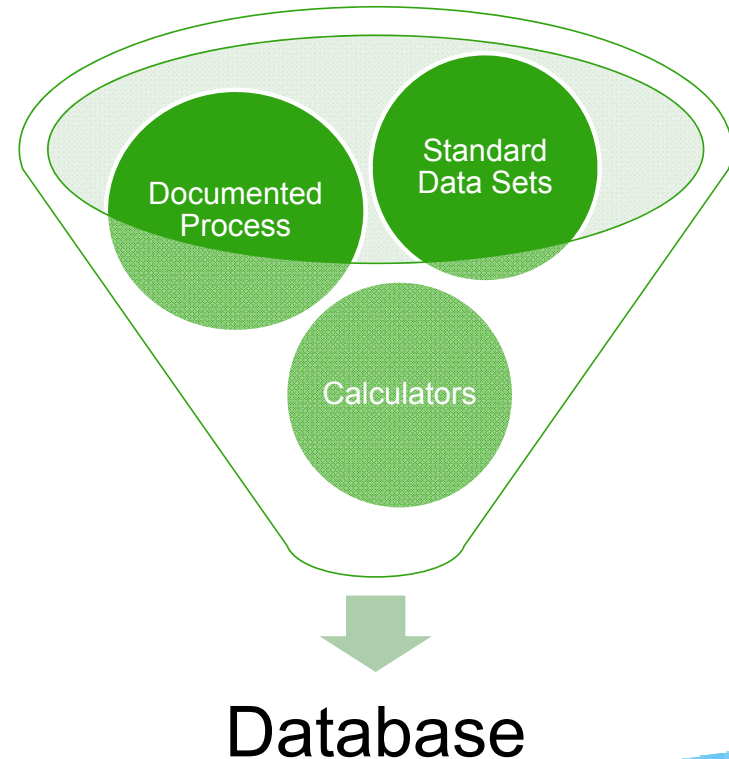
- » Use consistent factors for units & sources
- » Discuss data inputs, methods

## ► Develop calculators

- » Emissions unit calculator

## ► Create Database

- » Standardize data input
- » Consistency in data collection
- » Reports and summaries for EAOR entry



## Next Steps

### ► **Maintain Data Set**

- » Update any changes in sources
- » Periodically update emission factors as needed

### ► **Evaluate Emission Calculations**

- » Review sources for opportunities to improve emissions factors (emission testing)
- » Identify sources of internal on-line data for emission reporting

### ► **Replication opportunities**

- » Reporting to other federal, state & local agencies
- » Corporate reporting of environmental data

# Questions?



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55<sup>th</sup> Annual Conference & Exhibition

*“Shaping the Future:  
Risk and Resiliency”*

## Air Quality Policy and Permitting

**OCTOBER 30, 2019**

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# Overview

- NSR Reform—Policy Changes and Rules—*Aggregation and Project Emissions Accounting*
- CAA Section 112--*Once In, Always In*
- EPA Enforcement -- Using *The General Duty Clause*



**NSR Reform –  
Policy Changes and Rules  
Aggregation**

## NSR Reform – Policy Changes and Rules Aggregation

- Agencies are concerned that regulated entities might try to break large modifications into smaller actions to avoid NSR review.
- 1990 “Puzzle Book” says aggregation not required to be considered with respect to a project if the proposed increase by itself is minor and no deliberate decision to split an otherwise significant project into smaller ones to avoid NSR review
- Generally, the “splitting” issue has been reviewed by agencies on case-by-case basis using numerous EPA-issued after-the-fact “guidance” memos outlining various cases where separate minor projects either should or should not have been aggregated.

## NSR Reform – Policy Changes and Rules Aggregation

- *E.g.*, one memo from 1993 listed five criteria to consider:
  - whether a source has filed more than one minor source or minor modification application associated with emission increases at a single plant within a short time period;
  - whether the source has treated the modifications as one project for funding purposes;
  - whether business reports, such as stockholder reports or reports to utility boards, indicate an intent to operate at higher production levels than what was approved in an initial permitting request that was followed shortly thereafter by another request;
  - statements of authorized representatives of the source regarding plans for operation showing intent to circumvent preconstruction review; and
  - EPA's own analysis of the economic realities of the projects considered together.

## NSR Reform – Policy Changes and Rules -- Aggregation

### *Permitting Example*

- A power generating facility added a new steam turbine generator (STG) in April 2014, enhancing the facility's efficiency by using excess steam that otherwise was being vented (a minor modification)
- The same facility filed an application in May 2015 to allow the use of backup ULSD fuel oil due to reliability issues and market design changes imposed by the ISO in response to a cold weather crisis that had occurred in the winter of 2014 (a minor modification)
- EPA suggested the two projects had been deliberately split to avoid NSR significant emission thresholds.

## NSR Reform – Policy Changes and Rules -- Aggregation

### *Permitting Example*

- Facility walked through the “guidance” memos and demonstrated the back-up ULSD project was unrelated to the steam project because:
  - funding for the fuel oil project was separate from the steam generator project;
  - the need for ULSD was not identified until after the STG project permit had been pending for over 8 months;
  - ULSD project was triggered by a new reliability program imposed by the grid operator that was not approved by FERC until June 2015 and still was subject to appeal

## NSR Reform – Policy Changes and Rules -- Aggregation

### *EPA Efforts to Clarify*

- EPA had issued a final rule on Jan. 15, 2009, describing principles to use when deciding whether to aggregate separate projects during NSR permit applicability reviews.
- The 2009 rule called for aggregating nominally separate projects if they are “substantially related”—or technically or economically dependent. Still said this had to be determined case-by-case—there was no “bright line” definition of substantially related.
- Timing of projects is a factor, but source need not aggregate based on timing alone. Created a rebuttable presumption that activities occurring more than 3 years apart were not substantially related and should not be aggregated.
- Also, don’t need to aggregate simply because projects support overall purpose of plant.
- The 2009 final rule and litigation about it were held in abeyance while EPA it considered a petition for reconsideration that had been filed by NRDC in January 30, 2009




## NSR Reform – Policy Changes and Rules -- Aggregation

### *EPA Efforts to Clarify*

- The good (?) news—in November 2018, EPA issued a final action lifting the stay, denying reconsideration, and leaving the 2009 rule in place. (See, Reconsideration of Aggregation, 83 *Fed. Reg.* 57,324 (Nov. 15, 2018)(Final Action)
- So is there any greater certainty now on the aggregation issue?
- “Rule” is interpretive, not legislative, i.e., no language change in the underlying rules, and 3 year rebuttable presumption in particular is described as “policy.” States not bound.
- NRDC filed petition for judicial review of new rule and revive prior challenge of 2009 rule.





**NSR Reform –  
Policy Changes and Rules  
*Project Emissions Accounting***

## NSR Reform Policy Changes

## Project Emissions Accounting

- In 2002, a rule was adopted that set the actual- to- projected-actual approach to calculating emissions increases and decreases as a result of a proposed modification.
- The emissions increase for the existing unit can be determined by comparing [Baseline Actual Emissions](#) to projected actual emissions
- This test applies only to changes at existing emissions units
- The projection of post-change annual emissions during the five or 10 years following the change (depending on if the change increases the capacity of the existing emissions unit).

## NSR Reform Policy Changes -- Project Emissions Accounting

*“Not to second guess you, human, but I think you have taken the wrong track”*



- **Dec. 7, 2017, EPA memo** - Actual-to-Projected Actual Applicability Test
  - ***EPA will not second guess owner/operator's projections.*** If permittee followed calculations, without clear error, showing NSR is not triggered, EPA will limit enforcement evaluation to review of post-project actual emissions (Response to *Detroit Edison* case)
  - States still can implement their state-specific programs contrary to this, however

# NSR Reform Policy Changes

## *Project Emissions Accounting*

- **March 13, 2018, EPA memo**

- Traditionally in NSR applicability reviews only project increases are addressed in “Step 1” of the NSR applicability analysis
- March 2018 memo says permittee may consider both emissions increases and decreases at multiple “project” sources in 1<sup>st</sup> Step
- Memo indicates emissions decreases from the “project” may be deducted even if not creditable or enforceable
- Reaffirms that source is responsible for defining the “project” scope

## NSR Reform Policy Changes--Project Emissions Accounting

*Effect of March 13,  
2018 EPA Memo*

- Assume an existing facility is planning to install a new natural gas single cycle turbine, which will result in an increase of 60 tons per year (tpy) of NOx.
- And assume this will allow plant to shut down an existing fuel oil boiler (leading to a 35 tpy NOx decrease)
- But also assume that the facility had added a small burner 3 years ago (with NOx emissions of 20 tpy)
- What happens when the pre-March 13, 2018 vs. the post-March 13, 2018, memo approaches are applied?

## NSR Reform Policy Changes--Project Emissions Accounting

*Effect of March 13,  
2018 EPA Memo*

- Under the pre-March 2018 NSR policy/guidance
  - In Step 1, the facility looks only at the increase associated with the new unit-- 60 tpy--which is greater than the threshold for NOx threshold of 40 tpy
  - Then the facility proceeds to Step 2 (netting) to account for all contemporaneous emissions increases and decreases for the project: 60 – 35 (boiler shutdown) + 20 (prior new burner)= 45 tpy, which is greater than the significant emissions threshold for NOx
  - So the facility triggers major NSR for NOx, with air dispersion modeling analysis and BACT (for PSD), or offsets and apply LAER (for non-attainment NSR)

## NSR Reform Policy Changes--Project Emissions Accounting

*Effect of March 13,  
2018 EPA Memo*

- Under the Post March 2018 NSR policy/guidance
  - The facility can take credit for emissions decreases from shutting down the fuel boiler In Step 1, resulting in:
    - 60 tpy NOx increases from new turbine; minus 35 tpy NOx decrease for shutting down the fuel oil boiler= 25 tpy NOx
  - Because the increase is less than the NOx threshold of 40 tpy the project does not trigger major NSR; step 2 not necessary

# NSR Reform Policy Changes

## *Project Emissions Accounting*

- The March 2018 memo is only guidance right now—states aren't bound by it, particularly states with “in lieu of” approved SIPs that might be more stringent.
- On August 9, 2019, EPA, however, has issued a proposed rule that makes language changes in 40 C.F.R. 52 to clarify this result.
- If the proposed rule is adopted, states with approved SIPs arguably are governed by their SIP unless and until it is revised and approved.





**CAA Section 112 –  
*Once In, Always In***

## Repeal of “Once In, Always In”

- Under NESHAPS program (40 CFR Part 63) there was a May 16, 1995, memo (Seitz) that concluded that once a source is required to install controls or take other measures to comply with a MACT standard, it should not be able to use different controls to bring the source below major source status.
- EPA issued new guidance on Jan. 25, 2019, that withdrew the Seitz memo and stated that a source that take enforceable limits on its PTE and takes measures to bring HAPs below applicable thresholds can become an area source no matter when it chooses to do so. This is consistent with the approach used in Title V permitting. Proposed rule issued July 26, 2019.
- Individual states are handling this differently; most on a case-by-case basis. So sources will need to work with the permitting authority to change their status
- For some categories, there are standards for both major sources and area sources, while certain source categories only have area source rules



# **EPA Enforcement Using General Duty Clause**

## EPA Enforcement Using The General Duty Clause

*U.S. v. Margiotta,*  
No. CR 17-143-  
BLG-SPW-2, 2019  
LEXIS 156994, 11  
(D. MT. Sept. 13,  
2019).

- EPA is increasing its enforcement role in industrial accidents, at times overshadowing the role traditionally played by the Occupational Safety and Health Administration (OSHA).
- EPA often takes tougher enforcement actions than OSHA and is more willing to bring criminal charges.
- This trend is reflected in a recent case affirming EPA's authority to bring criminal charges for alleged violations of the General Duty Clause (GDC) of Section 112(r)(1) of the Clean Air Act (CAA) (42 U.S.C. § 7412(r)(1)).

## EPA Enforcement Using The General Duty Clause

- Under the GDC, owners and operators of facilities that produce, process, handle, or store extremely hazardous substances have a “general duty” to identify hazards that may result from releases; design and maintain safe facilities to prevent releases; and minimize the consequences of accidental releases.

## EPA Enforcement Using The General Duty Clause

- Section 112(r)(1) states, in part:
  - “... **owners and operators** of stationary sources producing, processing, handling or storing [ a chemical in 40 CFR 68 or any other extremely hazardous substance] **have a general duty** [in the same manner and to the same extent as the general duty clause in the Occupational Safety and Health Act (OSHA)]
  - **to identify hazards** which may result from (such) releases using appropriate hazard assessment techniques,
  - **to design and maintain a safe facility** taking such steps as are necessary to prevent releases, and
  - **to minimize the consequences of accidental releases which do occur.”**

## EPA Enforcement Using The General Duty Clause

- In December 2017, the United States indicted an oil reclamation company **and its owner/operators** for, among other things, knowingly violating the CAA's GDC, since the company owner allegedly knew the facility wasn't safe for disposal or reclamation operations.
- The indictment followed an incident in 2012, where three employees were injured when vapors from a mislabeled tanker truck ignited and exploded at the Custom Carbon Processing Inc. facility in Montana.
- Because the OSH Act's GDC only allows for recovery of civil penalties, the owner argued that criminal charges could not be brought under the CAA GDC.
- The court found the CAA's GDC does not derive its enforceability from the OSH Act, and thus cannot limit violations of the CAA's GDC to civil penalties.

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## EPA Enforcement Using The General Duty Clause

- Though relatively unused after it was added to the CAA in 1990, the GDC is playing an increasingly prominent role in EPA's enforcement toolbox.
- Enforcement of the CAA Risk Management Planning requirements are now more often accompanied by GDC claims.
- Reducing the incidence of accidental releases at industrial chemical facilities, including through the enforcement of the GDC, is highlighted by EPA as a National Compliance Initiative for the next several years.
- The criminalization of the GDC in the *Margiotta* case takes this trend one step further.



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*“Shaping the Future:  
Risk and Resiliency”*

Air Quality Policy and Permitting – The End!

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