

Transient Conditions in Permits

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Florida Section Air & Waste Management Association October 26, 2017







Outline

- > Background
- > The Revisions to 62-210.700
- > Transition for Transients
- > Example Permits



Background - Why Change?

- Sierra Club Petition -> SSM SIP Call
- > EPA Changes Policy on SSM
 - No more automatic exemptions
 - No more affirmative defense
- Deadline to Revise SIP 11/22/2016



Jack Welch



Revisions to 62-210.700

- 6) After May 22, 2018, subsections 62-210.700(1) and (2), F.A.C., shall not apply to:
 - Emission limits in Chapter <u>62-296</u>, F.A.C., that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520; and,
 - Unit-specific emission limits that have been or that become incorporated into the State Implementation Plan for the State of Florida, *identified in 40 C.F.R. §52.520*.
- 7) Subsections 62-210.700(1) and (2), F.A.C., shall not apply to unit-specific emission limits established after October 23, 2016, pursuant to *Rules 62-212.400 and 62-212.500*, *F.A.C*
- > Emphasis added



New 62-210.710

- 1) A facility <u>may</u> request that the Department establish by permit one or more unit-specific secondary emission limits to apply during a specified transient mode of operation in lieu of the unit's <u>primary emission limit in Chapter 62-296, F.A.C.</u>, <u>or the State Implementation Plan of the State of Florida, identified in 40 C.F.R. §52.520.</u> Transient modes of operation include, but are not limited to, periods of startup, shutdown, or fuel switching...
 - Demonstrate that the facility has implemented or will implement recordkeeping practices (e.g. <u>continuous emissions monitoring</u>, parametric data collection and storage, contemporaneous operating logs) sufficient to demonstrate compliance with the unit-specific secondary emission limit.

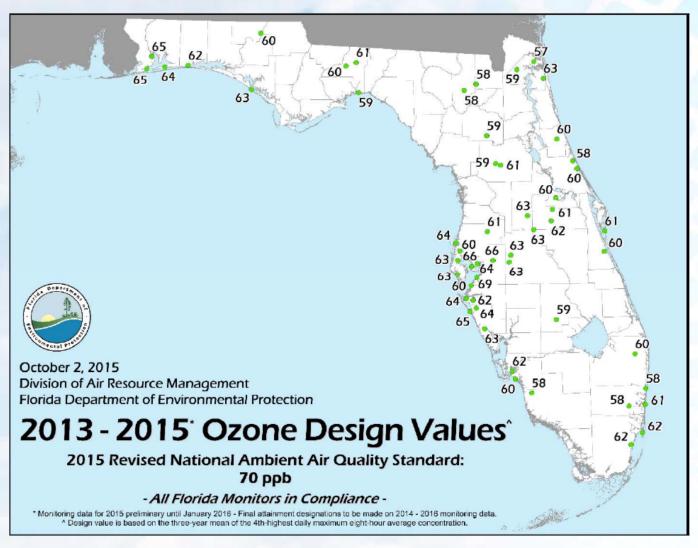


What are the Emissions?

- > Startup/Shutdown
- > What about other events during operation?
 - Transmission-testing
 - Tuning events
 - Soot Blowing
- > Maintenance-related emissions
 - Blowdowns
 - Tank landings
 - Painting
 - Solvent degreasing
 - Emergency Engine Readiness Testing



What are the AQ Impacts?



Source: http://www.dot.state.fl.us/planning/Policy/cleanair/Air%20Quality%20Fact%20Sheet.pdf



What are the AC Impacts?

- > New PSD
 - "Neoclassical" approach to secondary BACT
 - Reference NSPS / NESHAP by pollutant
 - Incorporate modeling considerations
- > Modifying (increasing) existing limits
 - ❖ Is it BACT?
 - Is it monitored by CEMS / PEMS?
 - Is it a SIP limit?



- > New PSD Pre 10/2016:
 - Because of the long-term nature of the NOX, SO2 and HCI mass emission rate limits and as part of PSD and the associated BACT determination, all emissions data for these pollutants, including periods of startup, shutdown and malfunction, shall be included in any compliance determinations based on CEMS data.



> New PSD Post 10/2016:

Pollutant	Emission Standard	Basis	Compliance Method	Averaging Time ^a
NO_{X}	0.10 lb/MMBtu	Primary BACT (Rule 62- 212.400(BACT), F.A.C.)	NO _X CEMS	30-operating-day rolling
	130 lb/hr			Daily block
	0.20 lb/MMBtu	NSPS Subpart Db, Secondary BACT (40 CFR 60.44b(l)(1), Rule 62-212.400(BACT), F.A.C.)		30-operating-day rolling, including startup, shutdown, and malfunction
	471.7 tons per year	Applicant Request		12-operating-month rolling, including startup, shutdown, and malfunction



- > Modify BACT Pre 10/2016:
 - ❖ DLN Tuning. CEMS data collected during major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications....
 - ❖ [Rule 62-4.070(3), F.A.C.]



- > Modify BACT Post 10/2016:
 - DLN Tuning. Data collected by the NOX CEMS during a DLN tuning session may be excluded from demonstrations of compliance with the numerical NOX BACT emission limit, provided the tuning session is performed in accordance with the manufacturer's specifications or determined best practices... The permittee shall operate the NOX CEMS during all DLN tuning sessions, and the permittee shall comply with NSPS Subpart GG at all times.
 - Permit No. 1234567-001-AC/PSD-FL-123; Rule 62-210.710(2)(b), F.A.C.]



"I welcome change, as long as nothing is altered or different."

Quotesaday.com

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"Hot Air" Issues versus "Hot" Air Issues





A Case Study

William F. Karl, P.E. Senior Engineer









Fall 2013	FERC commenced environmental review		
December 2015	FERC releases final impact statement		
February 2016	FERC issues Certificate Order granting Section 7 certificates and approves construction of all three pipeline segments		
August 2016	Construction commences		



- Environmental justice requires agencies to consider whether the projects they sanction will have a "disproportionately high and adverse" impact on low-income and predominately minority communities.
- Seizure of property eminent domain
- Increase burning of natural gas will hasten climate change and its potentially catastrophic consequences.

- United States Court of Appeals for the District of Columbia Circuit Ruling dated August 22, 2017, agreed FERC's environmental impact statement did not contain enough information on greenhouse gas (GHG) emissions that will result from burning gas the pipelines will carry.
- "We conclude that at a minimum, FERC should have estimated the amount of power-plant carbon emissions that the pipelines will make possible."

- FERC must consider not only the direct effects but also indirect environmental effects of the project under consideration.
- "Indirect effects" are those that "are caused by the [project] and are later in time or farther removed in distance, but are still reasonably foreseeable."

- FERC argued it is impossible to know exactly what quantity of GHGs will be emitted, as it is dependent on the operating decisions of individual power plants.
- Court ruled NEPA analysis involves some "reasonable forecasting," and agencies may sometimes need to make educated assumptions about an uncertain future.

- FERC argued some of the new pipelines' transport capacity will make it possible for utilities to retire dirtier, coal-fired plants.
- Court ruled EIS is required to cover effects that include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes the effect will be beneficial.

- FERC argued the power plants in question will be subject to "state and federal air permitting processes."
- Court ruled the existence of permit requirements overseen by another federal agency or state permitting authority cannot substitute for a proper NEPA analysis.

- On September 27, 2017, FERC published a draft supplemental environmental impact statement that:
 - Provided a range of quantified GHG emissions, including net PTE, gross PTE, and full burn emissions
 - Stated GHG emissions equated to between 3.7 and 9.7% of 2014 Florida GHG Inventory
 - Could not find a suitable method to attribute discrete environmental effects to GHG emissions
 - Stated that Social Cost of Carbon (SCC) tool, which addresses climate change impacts on a global level, was not appropriate for a specific project

CPV Valley Energy Center Wawayanda, NY

- Millennium Pipeline Co. is seeking 7.8-mile lateral pipeline to supply natural gas to 650-MW combinedcycle plant.
- On August 31, 2017, NYSDEC denied three key permits required to construct the pipeline, citing an August 22nd federal decision related to a pipeline project in the Southeast.

CPV Valley Energy Center Wawayanda, NY

- Three key permits include water quality certification through federal CWA and two state permits to allow the pipeline to cross streams and freshwater wetlands.
- NYSDEC issued PSD permit on August 1, 2013.
- CPV president and CEO stated CPV Valley Energy Center will still go online by early 2018, operating on backup fuel oil.

Questions?

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Florida Department of Environmental Protection Division of Air Resource Management

Air Regulatory Updates

Preston McLane October 2017













Air Rulemaking Updates





- Chapter 62-210, F.A.C. (Stationary Sources – General Requirements) – create Air General Permit for Asphalt Concrete Plants, amend the startup and shutdown sunset date, and revise the Facility Relocation Notification form.
- Chapter 62-296, F.A.C. (Stationary Sources – Emission Standards) – Secondary emission limits for periods of startup and shutdown.
- Chapter 62-213, F.A.C. (Operation Permits) – Create Title V General Permit for Air Curtain Incinerators, and improve process for minor permit amendments.



Fast-Track Adoptions

Several fast-track adoption of federal regulations in Rule 62-204.800, F.A.C., are currently underway:

- Part 60, Subpart BBa Adoption of Standards of Performance for Kraft Pulp Mill Affected Sources for which Construction, Reconstruction, or Modification Commenced after May 23, 2013.
- Part 60, Appendix F (1) Amending procedures for quality assurance for particulate matter continuous emission monitoring systems (CEMS); and (2) technical correction to the quality assurance requirements for gaseous HCI CEMS.
- Part 63, Subpart XXX and A Amending Ferroalloys Production source NESHAP to allow existing facilities with positive pressure baghouses to perform visible emissions monitoring as an alternative to installing and operating bag leak detection systems.
- Part 63, Subpart UUUUU Amending electronic reporting requirements for the NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units (MATS) to allow for the temporary submission, through June 30, 2018, of reports in PDF format.



EPA's SSM SIP Call

- Revisions to 62-210.700(1) (**Excess Emissions**). The Division established Rule 62-210.710 to create secondary emission limits during transient modes of operation (i.e., startup and shutdown).
- Chapter 62-296 is under rule development to ensure facilities subject to SIP-based emission limits have achievable limits/work practices during transient modes of operation (startup/shutdown). Rules under development include:
 - √ .402 Sulfuric Acid Plants
 - √ .404 Kraft Pulp Mills
 - ✓ .405 Fossil-Fuel Steam Generators
 - √ .408 Nitric Acid Plants

- ✓ .410 Carbonaceous Fuel Burning Equipment
- ✓ .570 RACT for Major VOCand NOx-Emitting Facilities



111(d) State Plans

Combustion of solid waste is addressed under 111 and 129 of the CAA. New units are regulated under an NSPS. For existing units, EPA establishes Emissions Guidelines, which must then be incorporated into a State Plan in accordance with 111(d).

- Revised current CISWI 111(d) State Plan to incorporate a mass-based mercury standard for existing waste kilns.
- Proposed revision to MSW landfill 111(d)
 State Plan to incorporate federal emissions guidelines (Cf) for existing MSW landfills, which requires capture and control.







Air Permitting Responsibilities



FY 2017-18 Transition



Cement (7) Pulp & Paper (6)



Districts & Local Programs



MSW Landfills (45)



Sugar (4)

Takes

Fertilizer (6)





Air Permit Quality Audits

The Air Division audits District and Local Programs to:

- Identify common deficiencies
- Improve permit quality
- Assess effectiveness of training
- Provide training topics



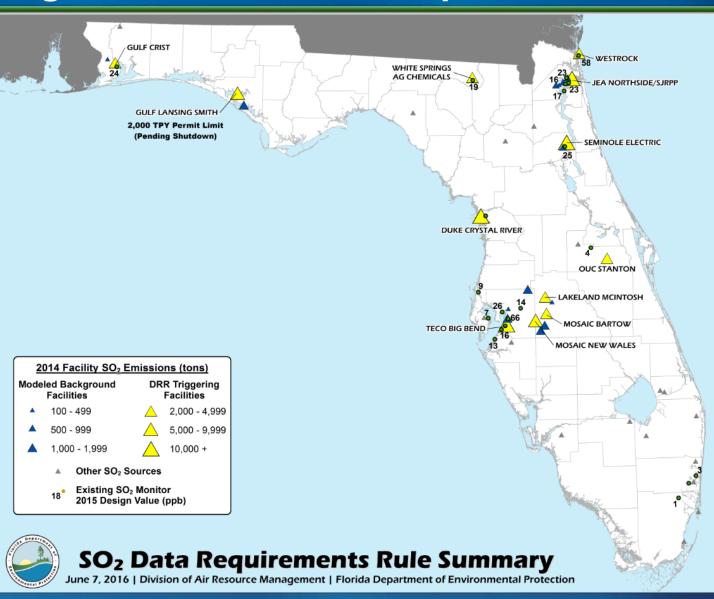
Currently, the Air Division is reviewing several permits issued each quarter in District offices for:

- Applicability determinations (e.g., NSPS, NESHAP, PSD, Title V, etc.)
- Adequate documentation in Technical Evaluation report
- Permit format
- Current regulatory citations
- Clear and specific conditions



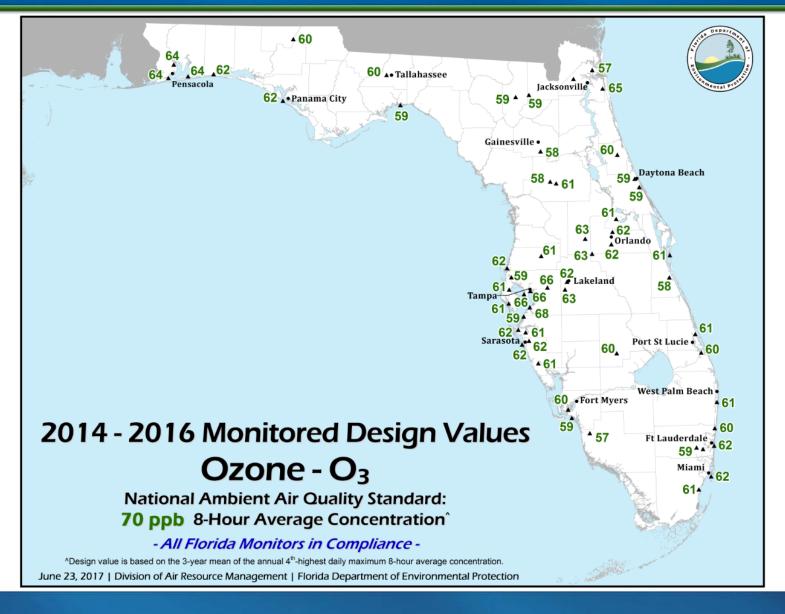
SO₂ NAAQS Area Designations - Modeling Under EPA's Data Requirements Rule

- Area characterization modeling for 11 areas subject to EPA's Data Requirements Rule.
- Expecting EPA to notice final area designations by December 31, 2017.





EPA's Revised Ozone NAAQS





DARM Staffing Updates

Permitting

• Eric Dunkelberger – Joins the Division from the Southeast District; Permit Engineer (will provide support on permitting in the Southeast District, together with other Division permitting engineers).

Compliance

 Dennis Tyus – Joins the Division from Water Resource Management; will be assisting with non-compliance/ enforcement case reviews, database management (primarily Asbestos database), and serve as EPA data liaison

Air Monitoring

- Chris Armour Joins the Division from the DEAR laboratory; responsible for gravimetric lab, will be training in field operations laboratory and the shop that maintains monitoring equipment.
- Alana Eashoo Joins the Division from Florida State University; responsible for PM2.5 laboratory, standards laboratory, and data validation.
- Kyle Wolgamott Joins the Division from the Sarasota County Air Monitoring Program; primary field operator for the Suncoast region air monitoring sites.

Siting Coordination Office

 Amanda Dyer – Joins the Division from Tennessee having served in the U.S. Navy's HAZMAT command; will provide support for certification processes under Florida's Power Plant Siting Act, Natural Gas Line Siting Act, and transmission line siting.



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