

Florida Department of Environmental Protection Division of Air Resource Management

Florida AWMA Division Updates and Air Permitting 101

October 2018













Who are these guys?



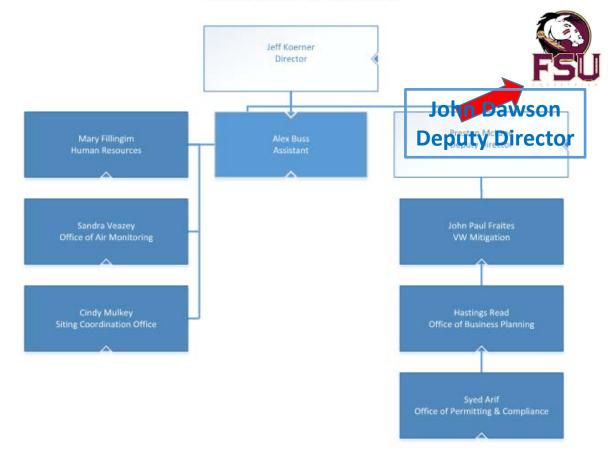
Division of Air Resource Management Director's Office

Air Permitting Manager: David Read

Air Compliance Manager: Jessica Dalton

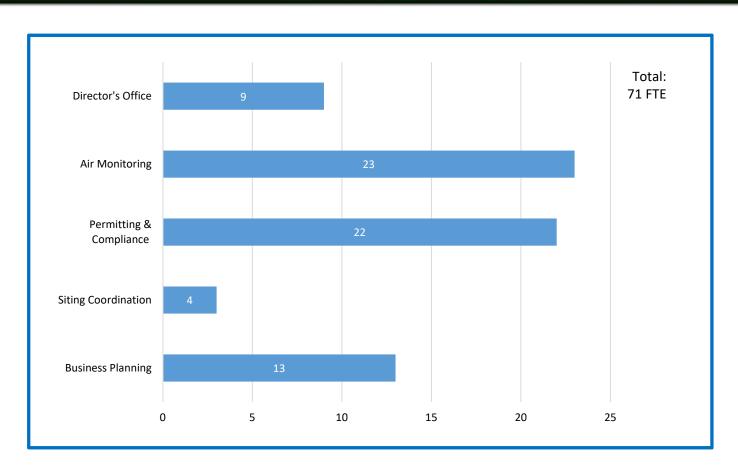








How big is the Division?



Note: Program Administrator for Siting Coordination office also supervises 6 permit engineers in the oil and gas program.



Mission

We see a future where the need for air regulation is minimized.



Our Mission:

- Responsibly manage Florida's air resource.
- Understand our affect on Florida's economy.
- Provide regulatory certainty.
- Be accountable to our customers.

Recognize that consistent and fair regulation is integral to maintaining a prosperous State.



Oversight

Agency	Asbestos	Permits	C&E	Monitor	Title V	SOA
Division	0	Y,O	0	Y,O	Y,O	0
Districts (6)	Υ	Υ	Υ	N	Υ	N
Broward	Υ	Υ	Υ	Υ	Υ	Υ
Duval	Υ	Υ	Υ	Υ	N	Υ
Hillsborough	Υ	Υ	Υ	Υ	Υ	Υ
Manatee	N	N	N	Υ	N	N
Miami-Dade	Υ	Υ	Υ	Υ	Υ	Υ
Orange	Υ	Υ	Υ	Υ	Υ	Υ
Palm Beach	Υ	Υ	Υ	Υ	Υ	Υ
Pinellas	Υ	N	Υ	Υ	Υ	Υ
Sarasota	N	Υ	Υ	Υ	N	Υ

O - Oversight



How do you regulate air?

New Source Review Attainment - PSD

- BACT
- Modeling

New Source Review
Non-Attainment

- LAER
- Offsets

NSPS

- Construct
- Modify

NESHAP

- New
- Existing

Acid Rain

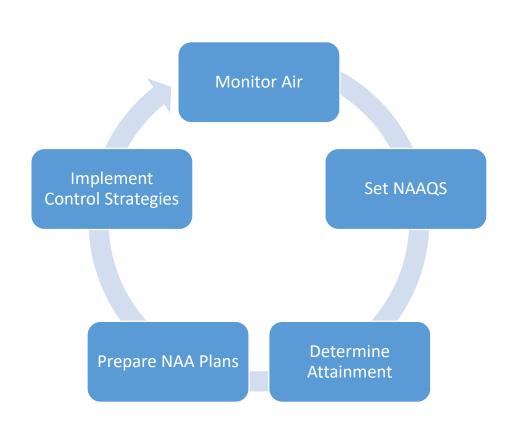
- Limits
- Allowances

RACT

- Limits
- Work Practices

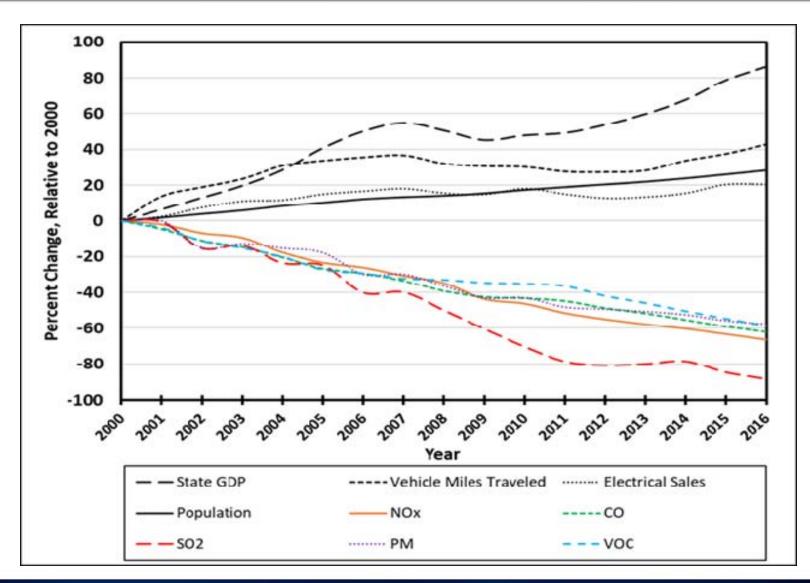
Transport

- Budgets
- Reassess



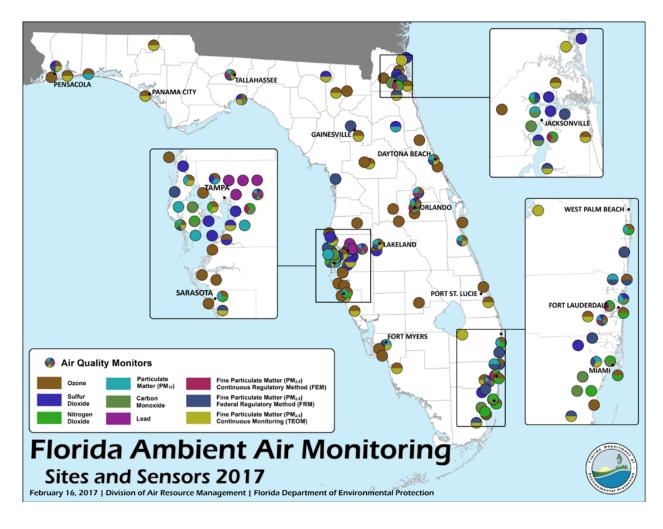


Grow with style





Measure and Report



- > 100 sites
- > 220 monitors
- > 90% coverage
- 8 DEP areas
- 9 local programs
- DEP is PQAO
- Monitor:
 - Carbon monoxide
 - Lead
 - Nitrogen Dioxide
 - Ozone
 - Particulate Matter
 - Sulfur Dioxide



Ozone Update



Sulfur Dioxide NAAs based on monitoring data:

- Small circular area in Nassau County
- Small hexagonal area in Hillsborough

Sulfur Dioxide NAAs based on modeling analyses:

- EPA's Data Requirements Rule, 2018
- Small area in Hillsborough/Polk

NAA status can severely impact business growth and the local economy



SUCCESS!

Hillsborough lead attainment status approved by EPA! Sulfur Dioxide NAAs based on monitoring data

- Ambient monitoring data shows compliance I Nassau and Hillsborough
- Final EPA approval expected over the next few months

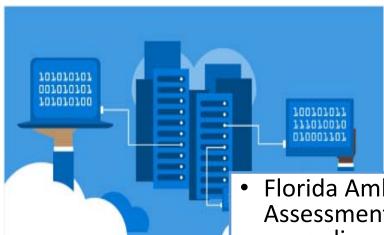
Sulfur Dioxide NAA based on modeling analyses

- DEP has worked with facility to address issue
 - New catalyst formulations for sulfuric acid plants
 - Replacements ongoing
 - New emissions caps and modeling analyses show compliance
- Working collaboratively with EPA on a process to re-designate area as quickly as possible, pre-draft document to EPA for review

We hope to have all of Florida designated as attainment for all NAAQS by mid-2019!



Ambient Monitoring Database



- Florida Ambient Monitoring and Assessment System (FAMAS) needs upgrading
- Will soon begin development of Air Monitoring and Validation Program (AirMVP) as replacement
- Update software, user interface, documentation, etc.



Chapter 62-210, F.A.C. Rulemaking



- Created new air general permit for asphalt plants
 - No air construction permit required
 - \$100 for 5-year general permit
 - Electronic registration not yet available
- Created new electronic relocation notice
 - Air curtain incinerators
 - Concrete batch plants
 - Rock crushers
- New Compliance Report <u>Submittal Checklist</u>
 - Avoid miscommunication
 - Working on electronic report submittals





DERA Grants

- Diesel Emissions Reduction Act (DERA)
- Federal DERA grant for Federal FY 2017 was \$301,990
 - DEP match of \$301,990 → gets additional \$150,995 in federal grant money
 - So, funds could total of \$759,976
- The Division has targeted replacing diesel-powered airport ground support equipment
- Equipment: baggage tugs, lifts, ground support units
- Individual grants with companies at airports
- Few companies were interested in replacing with electric
- Will open up to new diesel and alternative fuels
- Will likely just use DERA funds this year;
 could supplement with VW funds in the future





VW Settlement



For DERA and VW, contact:

John Paul Fraites

850-717-9021

- In January of 2018, Florida became a beneficiary
- DEP named lead agency
- \$166 million to fund diesel emission reduction projects under the VW Mitigation Trust
- Volkswagen Settlement Web Site
- Completed initial request for additional information
- Completed 60-day period to comment on eligible mitigation actions
- Provided an on-line survey to collect comments (over 2,000 survey responses received)
- Held public meetings in Jacksonville, Tallahassee, Orlando, Tampa, and West Palm Beach and two on-line webinars
- Currently reviewing comments and developing Mitigation Plan



Air Permitting 101

Do I need an air permit?

You need an air permit if your facility emits air pollutants as part of normal operations, UNLESS exempt by rule or agency determination.

Three ways to be exempt from air permitting:

- Conditionally or Categorically Exempt
- Generically Exempt
- Case-by-Case Exemption



Rule <u>62-210.300(3)(a)</u>, <u>FAC</u> currently identifies 36 categorical and conditional exemptions from air permitting. Examples:

- Equipment used for steam cleaning
- Space heating equipment, other than boilers
- Some laboratory equipment
- Brazing, soldering or welding equipment
- Stationary reciprocating internal combustion engines, limited
- Small printing operations



Generic Exemption

Rule <u>62-210.300(3)(b)</u>, <u>FAC</u> identifies criteria for being generically exempt:

- Not subject to unit-specific limitation or requirement
- Would not create a Title V source
- Not otherwise subject to permitting due to NSPS, NESHAP, PSD, or NAA review
- Meet emissions thresholds:

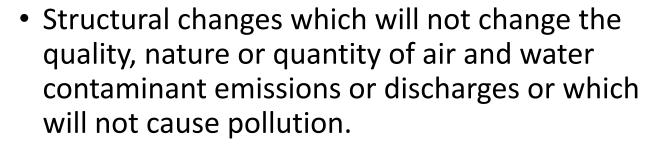
Emissions Unit: PTE < 500 lb/year of lead; 1000 lb/year of any HAP; 2500 lb/year of total HAP; or 5 tons/year any other regulated pollutant

<u>Facility</u>: < 1000 lb/year of lead; 1 ton/year of any HAP; 2.5 tons/year of total HAP; 25 tons/year of CO, NOx, and SO2; or 10 tons/year any other regulated pollutant



Case-by-Case Exemption

Department may exempt some activities Rule 62-4.040, FAC





• Existing or proposed installation which Department determines does not or will not cause the issuance of air contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified. Requires written agency action, subject to administrative rights in Chapter 120, F.S.



Air General Permits





Rule 62-210.310, FAC identifies 18 industrial categories for which owners may register for an "air general permit". Examples:

- Rock Crushers
- Concrete Batch Plants
- Dry Cleaners
- Asphalt Plants

The facility must meet the eligibility requirements, register (on-line available), and pay the \$100 fee.

Renewal every 5 years is required.



Air Permits

The next level of permitting is case-by-case:

- 1. Air construction (AC) permits to build Rule 62-210.300(1), FAC
 - a. Minor projects
 - b. Major projects in attainment areas (PSD)
 - c. Major projects in non-attainment areas (NAA)
- 2. Air operation permits to operate [Rule 62-210.300(2), FAC]
 - a. Minor facility (natural)
 - b. Synthetic minor facility (including FESOPs)
 - c. Title V facility



Title V Major Source

- ≥ 5 TPY of lead
- ≥ 10 TPY of any single HAP
- ≥ 25 TPY of any combination of HAP
- ≥ 100 TPY of any regulated air pollutant
- (Lower thresholds depending on severity of nonattainment)
- A "major stationary source" (PSD major)
- Contains one or more acid rain units
- Specifically designed a Title V source by Part 60 (NSPS or Section 129 incinerators) or Parts 61 and 63 (NESHAP)



PSD Major Source Thresholds

A major (PSD) stationary source emits or has the potential to emit any PSD pollutant:

- ≥ 250 tons/year (TPY), or
- ≥ 100 TPY for any facility on list of 28 PSD source categories



Triggering PSD Review

- Once a facility triggers a PSD major source threshold, the project is subject to PSD review for each pollutant > significant emissions rates
- For an existing PSD major stationary source, new projects are reviewed for PSD review based on the significant emissions rates
- Emissions netting



Significant Emissions Rates

POLLUTANT	SIGNIFICANT EMISSION RATE
Carbon monoxide	100 TPY
Nitrogen oxides	40 TPY
Sulfur dioxide	40 TPY
Ozone	40 TPY (VOC)
Particulate matter	25 TPY
PM ₁₀	15 TPY
PM _{2.5} , or	10 TPY
NOx	40 TPY
SO_2	40 TPY
Total reduced sulfur (including H ₂ S)	10 TPY
Sulfuric acid mist	7 TPY
Fluorides	3 TPY
Lead	1200 PPY
Mercury	200 PPY
Municipal waste combustor organics (measured as total tetrathrough octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5 x 10 ⁻⁶ TPY
Municipal waste combustor metals (measured as PM)	15 TPY
Municipal waste combustor acid gases (measured as SO ₂ and HCl	40 TPY
Municipal solid waste landfill emissions (measured as NMOC)	50 TPY
Greenhouse gases (GHG), must trigger for another PSD pollutant and	75,000 TPY (CO _{2e})



"List of 28"

The list of 28 PSD source categories includes:

- 1. Fossil fuel-fired steam electric plants > 250 MMBtu/hr
- 2. Coal cleaning plants w/thermal dryers
- 3. Kraft pulp mills
- 4. Portland cement plants
- 5. Primary zinc smelters
- 6. Iron and steel mill plants
- 7. Primary aluminum ore reduction plants
- 8. Primary copper smelters
- 9. Municipal incinerators > 250 tons per day
- 10. Hydrofluoric acid plants
- 11. Sulfuric acid plants
- 12. Nitric acid plants
- 13. Petroleum refineries
- 14. Lime plants

- 15. Phosphate rock processing plants
- 16. Coke oven batteries
- 17. Sulfur recovery plants
- 18. Carbon black plants (furnace process)
- 19. Primary lead smelters
- 20. Fuel conversion plants
- 21. Sintering plants
- 22. Secondary metal production plants
- 23. Chemical process plants
- 24. Fossil fuel boilers totaling > 250 MMBTU/hr
- 25. Petroleum storage and transfer units w/total storage capacity > 300,000 barrels
- 26. Taconite ore processing plants
- 27. Glass fiber processing plants
- 28. Charcoal production plants

For these industries, a facility is "major" if PTE ≥ 100 TPY.



Fugitive Emissions Included

When determining the PTE of a major source (Title V or PSD), fugitive emissions must be included for:

- 28 source categories on previous slide, and
- Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 (NSPS) or 112 (NEHSAP) of the Clean Air Act

Fugitive emissions are defined as those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.



Synthetic Minor

- Federally enforceable permit limits accepted so that PTE is less than major source thresholds
 - o Emissions limits
 - o Production rates
 - o Process rates
 - Hours of operation
- Air construction (AC) permit
- Federally enforceable state operation permit (FESOP)
- Both require public notice of intent to issue permit and a period to accept public comments
- Could apply to a facility, an emissions unit, or a project



Source Obligation

Rule 62-212.400(12), F.A.C.

(b) At such time that a particular <u>source or modification</u> becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a <u>relaxation in any enforceable limitation</u> which was established after August 7, 1980, on the <u>capacity</u> of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., <u>shall apply to the source or modification as though construction had not yet commenced on the source or modification.</u>



New Source Review Manual

Prevention of Significant Deterioration and Nonattainment Area Permitting

Already one of A&WMA's best-selling publications! The long-awaited new manual on this critical topic is based on over 25 years of rules, changes, lessons learned and solutions developed by renowned experts. The New NSR Manual is based on the 2002 Reform Rule and focuses on collecting and explaining existing policy and decisions.

Chapters cover:

- · PSD Applicability
- · Best Available Control Technology
- · Air Quality Analysis
- · Impact Analysis
- Nonattainment Area Requirements
- · Permit Writing
- Appeals and Enforcement with a section on the history and development of the rules.



LOOK INSIDE for a preview!

Table of Contents

Introduction by Gary McCutchen



EPA NSR Memos

- Actual-to-Projected-Actual Emissions Test for Modifications
- Revocation of Once-In-Always-In Policy for NESHAP
- Project Emissions Accounting (Project Netting)
- ACE Rule Includes NSR change for utilities to base modifications on "lb/hour" instead of "tons/year"







Pre-Storm - Regulatory

- Plan, distribute emergency contact information, and awareness of Continuity of Operations Plan (COOP)
- Contact EPA R4 and HQ (OECA)
- Contact potentially impacted facilities and exchange cell phone numbers; ask about potential needs
- Draft templates for requesting EPA fuel waivers and no action assurance (NAA) letters
- Send drafts to ourselves by email, copies to the EOC, and save on USB drives
- Secure ambient monitoring sites
- Emergency Final Orders (Governor and DEP Secretary)



Post-Storm - Regulatory

- Reestablish communications, assess employee safety and needs
- Contact all potentially affected industries and assess needs
- Obtain EPA Fuel Waivers (if not already)
- Obtain EPA "no action assurance letters"
- Obtain IRS tax penalty waiver for red-dyed diesel
- Update waivers and NAA letters on DEP <u>Hurricane</u>
 <u>Information</u> website at: https://floridadep.gov/hurricane
- Consider Enforcement Discretion



Emergency Final Orders and Amendments

- Declaration of Emergency (affected counties)
- May suspend statutes/rules that may hinder recovery
- Storage Tank Systems Repairs
- Petroleum Contact Water (discharges)
- Solid Waste Management (debris management sites)
- Hazardous Waste Management
- Air Resource Management
 - Air Curtain Incinerator (vegetative debris)
 - Open Pile Burning
 - Facility Repairs
 - Asbestos



Emergency Final Orders and Amendments, Cont'd

- Water Resource Management
 - Environmental Resource, Dredge and Fill, and Surface Water
 - Coastal Control Line Activities
 - Joint Coastal Permit Activities
 - NPDES Stormwater Construction General Permit
 - Submerged Lands
 - Water and Wastewater Plants and Systems
- Miscellaneous
 - Fees
 - Deadlines
 - Extensions, etc.



Post Storm - Fuel Waivers

- Pre-Sept. 15, waiver for wintertime gasoline (RVP)
- Waiver for blending "boutique gasoline" (R-BOB and C-BOB) for oxygenated fuels
- Red-dyed diesel (agricultural) waiver
 - 15 ppm sulfur
 - Must still pay taxes
 - Must also get waiver of tax penalty from IRS for nonapproved use



Post Storm - No Action Assurance Letters from EPA

- Vapor recovery systems at gasoline loading racks
- Tanker truck "tightness" certifications
- Landing floating roofs
- For Michael, Alabama used enforcement discretion for state sticker certification for tightness for refueling in AL
- Specific permitted facilities, such as:
 - Power plants, e.g., low-load operations
 - Bypass damaged controls

Non-compliance must result from storm impacts. Only applies to federal requirements.



Post-Storm

Post Storm – Asbestos

- Hurricane-generated rubble on ground can be removed for disposal – not subject to NESHAP
- Be smart! Protect haulers and landfills downstream. Recommend no grinding or size reduction of rubble.
- Demolitions after the storm ARE subject to NESHAP
- 10-day advance notice waived for ordered demolitions, but notice must submit no later than 1 day after commencing demolition



Post-Storm

Post Storm – Open Burning

- Pile burn with proper set-backs and Forestry approval
- Only hurricane-generated vegetative debris
- No burning of prohibited materials
- Air curtain incinerators recommended
 - No air permit required for temporary burns related to hurricane-generated debris
 - Proper pit dimensions
 - Proper set-backs



Post-Storm

Post Storm – Repair

- Emergency Final Orders address repair
- Rule 62-4.130, F.A.C. Plant Operation Problems. "If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules."



Thanks!

David Read, Environmental Administrator Permitting Section Office of Permitting and Compliance 850-717-9075

Jeff Koerner, Director
Division of Air Resource Management
850-717-9000