



**Florida Department of Environmental Protection**

# **Requests for Additional Information (RAIs)**

**Stephen Hathaway, P.E.**

**October 25, 2017**





# Initial Completeness Review

- Basis: Rule 62-4.055, F.A.C. & 403.0876, F.S. [Link to 403.0876, F.S.](#)
- Within **30 Days** the Department shall review the application and request submittal of all Additional Information (RAI-1) the department is permitted by law to require. Resets Clock to Zero.
- The Applicant shall have **90 Days** to submit RAI response and can notify in writing of circumstances requiring up to **another 90 Days**. Shall be granted based on good cause. RAI Response Restarts Clock.
- Within **30 Days** after Receipt of RAI Response, the Department shall review and may request only the information needed to clarify such Additional Information or to answer new questions raised by or directly related to such Additional Information. (RAI-2)
- If the Applicant believes the RAI is not authorized by Law or Rule, the Department, at the Applicant's request, shall proceed to process the Application. (Issue or Deny)



# Initial Completeness Review

## ADMINISTRATIVE CHECKLIST FOR PERMIT APPLICATION

Facility Name: \_\_\_\_\_

Facility Location: \_\_\_\_\_

Date Received: \_\_\_\_\_

Type of Permit Application: \_\_\_\_\_

Permit Application Number: \_\_\_\_\_

APPLICATION ITEM			received with application
	Yes	No	COMMENTS
Application fee included			
Site location map			
Facility layout drawing/site map			
Is application signed?			
Contact name & telephone number			
Is application signed and sealed by the P.E.?			
Are all emissions units identified?			
Actual emissions for each emissions unit			
Potential emissions for each emissions unit			
Facility wide potential emissions			
Synthetic minor emissions limit identified, if FESOP			
Calculation included			
Stack parameters			
Regulatory requirements			
All required forms included			
SIC, SCC codes, UTM coordinates identified			

Completeness Determination Conducted By: \_\_\_\_\_

Date: \_\_\_\_\_



# Minimize RAIs

- Effective communication is the key to getting needed additional information.
- When possible, we encourage pre-application meetings.
- Identify important project details, applicable rules, issues.
- Contact Applicant to get answers early and possibly avoid RAIs (email or phone)
- Review permit history prior to asking questions
- Consider whether the information is actually needed.
- May be in our databases, previous applications, institutional knowledge.



# Possible Reasons for RAI

- Project not adequately defined/described
- No PSD Applicability Analysis for Projects Involving
  - Production Increase
  - Heat Input Increase
  - Efficiency Upgrades
- **Regulatory applicability requirements not fully addressed**
  - **NSPS**
  - **NESHAP**
  - **State Requirements**



# Possible Reasons for RAI

- Inadequate NSR review included when emission increase(s) expected
  - Calculation of emission factors
  - PAE vs BAE
  - Contemporaneous projects
  - Netting
  - De-bottlenecking
- New or more stringent NAAQS
- Non-attainment or maintenance areas
- Compliance issues



**Florida Department of Environmental Protection**

# **Time Clocks, Administrative Rights and Petitions**

**Stephen Hathaway, P.E.**

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**October 25, 2017**





# Overview

- Permitting Time Clock
- Comment Period
- Publications
- Petitions

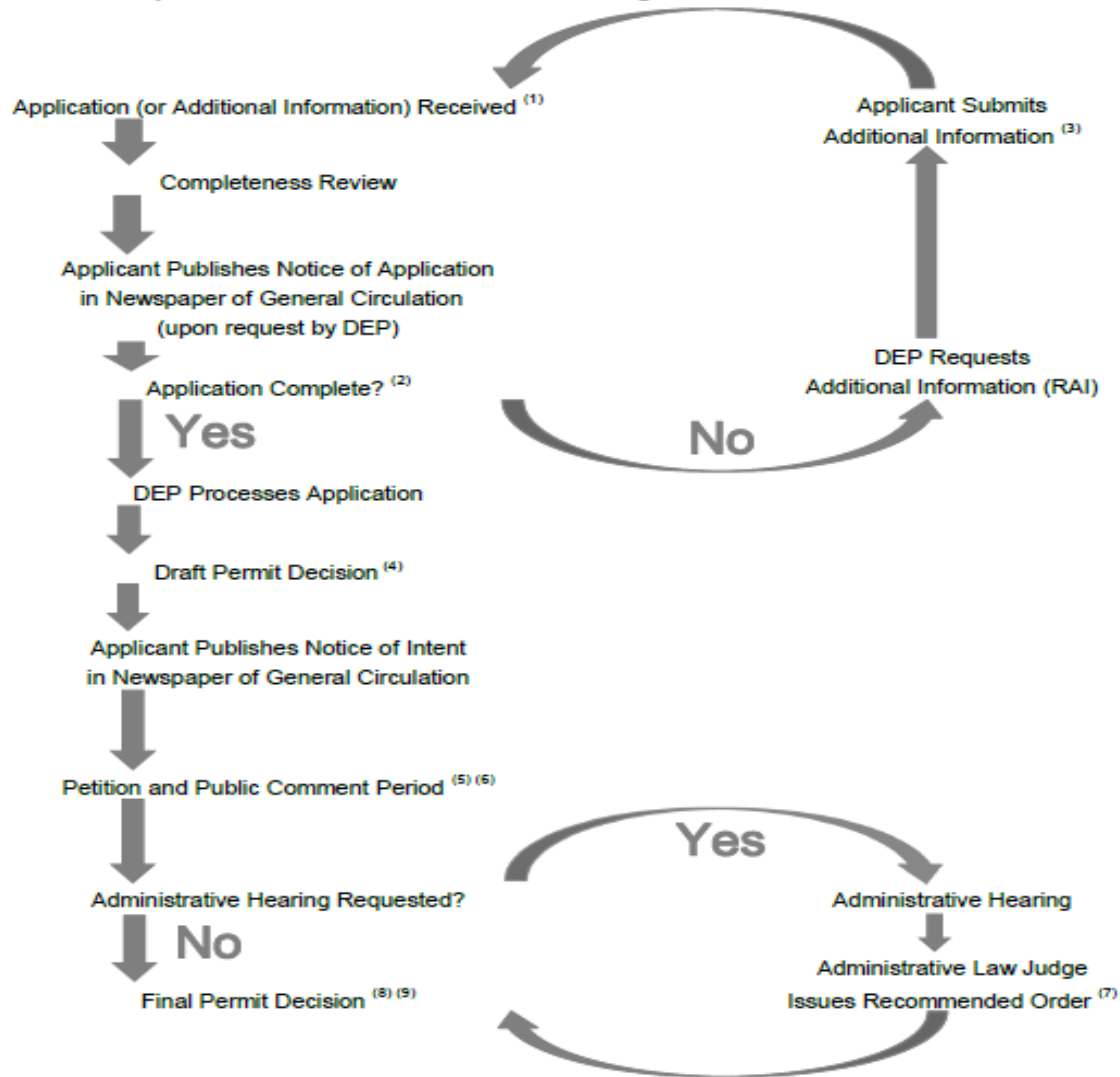




# Air Construction Flowchart

**Simplified Air Construction Permitting Flow Chart**

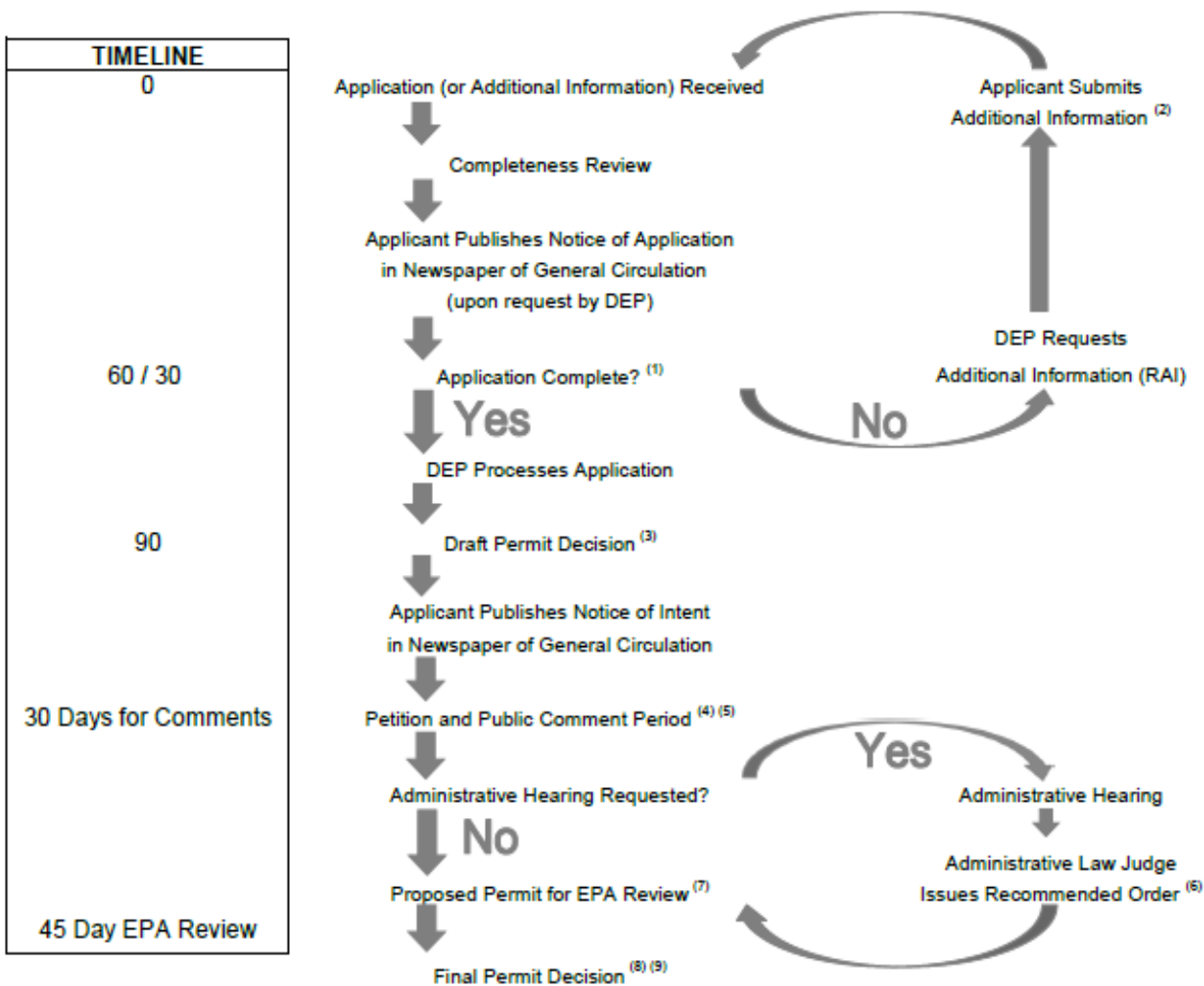
Timeline Day
0
30
90





# Title V Permitting Flowchart

Simplified Title V Air Operation Permitting Flow Chart





# Comment Period

## Is the comment period 14 or 30 days?

- FESOPs and air construction permits (not subject to 30 day comment period) = 14 days
- PSD, PAL, Title V, and case-by-case MACT = 30 days

## How long do I accept public comments?

- 14 or 30 days from publication of the public notice in the newspaper



# Comment Period

## **What if no comments are received or if the comments are minor in nature (and there hasn't been a petition filed)?**

- The final permit is issued and any comments are addressed in the final determination.

## **What if these comments do result in significant changes to the permit?**

- A revised intent is issued to the applicant, as well as anyone who has requested to be notified of our agency action.
- The applicant publishes the new intent.



# Publications

## **Types of publications:**

- Notice of Application
- Notice of Agency Action



# Publication – Notice of Application

## Can we require the applicant to publish notice of our receipt of their application?

- Yes, Section 403.815, Fla. Stat. and Rule 62-110.106(6), Fla. Admin. Code.

## Why would we?

- Actually, we are required to for projects, that because of their size, potential effect on the environment or natural resources, controversial nature, or location, are reasonably expected by the Department to result in a heightened public concern or likelihood of a request for administrative proceeding.



# Publications – Notice of Proposed Agency Action

## When is the applicant required to publish Notice of Proposed Agency Action?

- All construction permits for air pollution sources;
- Any other project that the Department finds is reasonably expected to result in a heightened public concern or likelihood of a request for administrative proceeding because of its size, potential effect on the environment or natural resources, controversial nature, or location;
- Note: If you require Notice of Application you have to require a Notice of Proposed Agency Action.
- FESOPs, except as provided in Rule 62-210.300(2)(b)1.b., Fla. Admin. Code; and
- Title V, Rules 62-110.106(7), and 62-210.350(1)(a), Fla. Admin. Code.



# Petitions

## How long does the applicant have to file a petition?

- 14 days from receipt of the intent/notice of permit.
- Send intent/notice via certified mail for US mail or delivery receipt if by email.

NOTE: It does not matter whether the recipient reads the email, any more than it matters if the recipient of a certified letter ever opens it.

## How long do persons who have requested notice of our agency action have to file a petition?

- 14 days from receipt, same as above.

## How long does the public have to file a petition?

- 14 days from date of publication in the newspaper.





# Petitions

## **How will I know if a petition is filed?**

- Petitions are filed with OGC, Rule 62-110.106(3), Fla. Admin. Code, and OGC will contact you.

## **What if I receive something that may be a comment, but might be a petition?**

- Contact OGC.

## **Who can petition?**

- Anyone, however, only those persons who are substantially affected by the Department's action will have standing to challenge the Department's decision (ex. the applicant, neighboring properties, etc.)



# Petitions

## A petition was received, now what?

- The agency action is stopped until the petition is resolved.
- Communicate with OGC, file review, etc.
- Prepare to defend our agency action (“hearing”).

## What hearing?

- If material facts are disputed, we’ll go before the Division of Administrative Hearings (“DOAH”), [www.doah.state.fl.us](http://www.doah.state.fl.us) before an Administrative Law Judge (“ALJ”).
- If no material facts are disputed, we’ll go to an informal hearing. A hearing officer is appointed within the Department.



**Florida Department of Environmental Protection**

# **Courtesy Preliminary Draft Review**

**Jon Holtom, P.E.**

**October 25, 2017**





# Pre-Draft Review

- When applicable
- Not an official part of the permitting process
- Timely turn around for comments
- Only comments that are related to the project
- Commenting after preliminary draft



# Only a Courtesy

- Not an official part of the permitting process
- Was implemented to assure proper understanding of project requests prior to issuance
- Enables minor corrections/clarifications prior to issuance
- Implemented to reduce the need for “public comments” from the applicant that result in the re-issuance of the Notice of Intent



# When Applicable?

- Always a nice idea
- When time allows
- When value is added
- When reviewers are responsive



# Applicant Actions

- Timely turn around for applicant review/comments
  - 3-5 days
  - Review permit and appendix only
  - No comments on TEPD or SOB



# Applicant Actions

- Only comments that are related to the project
  - No new issues addressed
  - No revised attempts to fix previous rejections
  - Only review and comment on what was requested to be addressed within the current application





# Applicant Actions

- If comments are addressed with preliminary draft, do not resubmit the same comments on draft permit during the public comment period



# Courtesy Pre-Draft Reviews

Questions and Comments?



**Florida Department of Environmental Protection**

# **Permit Types & Processing**

**Jon Holtom, P.E.**

**October 25, 2017**





# Permit Types

- Air Construction Permits
  - Minor Permits
  - Major Permits
- Title V Air Operation Permits
  - Draft Permits
  - Draft/Proposed Permits
- Concurrent Air Construction (AC) Permits and Title V Air Operation Permits (AV)
  - Draft AC and AV Permits
  - Draft AC and Draft/Proposed AV Permits
- Federally Enforceable State Operation Permits
  - Initial permits
  - Renewals involving material changes unless an air construction permit had undergone a public notice



# Concurrent Air Construction and Title V Air Operation Permits

- Waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V permit.
- Draft Air Construction and Title V permits will be issued at the same time.
- Written Notice of Intent and Public Notice will contain the rights and comment periods for both permits.
- Rights and comment periods for the draft permits will run concurrently.
- Final air construction permits will be issued after the comment period has ended. Final Title V permit issued after EPA review concludes.



# Draft/Proposed Title V Permits

- Draft and proposed permits are issued concurrently.
- Draft/proposed permits may be issued for only routine and non-controversial Title V Renewals and Revisions.
- Draft/proposed permits will not be issued for:
  - Substantial changes made to the Title V Permit
  - Coal-fired units
- Time clocks will run concurrently:
  - 30-day comment period
  - 45-day EPA review period
  - [R4TitleVFL@epa.gov](mailto:R4TitleVFL@epa.gov)



# Draft/Proposed Title V Permits

- If a substantial change is made to the permit based on public comments or a petition (or extension of time) for an administrative hearing or resolution of public comments are outstanding by day 44 of EPA's 45-day review period, the proposed permit must be withdrawn from EPA review. Resolution of issues could result in the need for a revised draft permit and new Public Notice.



# Rights and Comments

- Affected parties may petition for an administrative hearing within 14 days from the date of receipt of the notice or from date of publication of the Public Notice, whichever comes first (for each party).
- Affected parties, federal agencies and the public may provide comments on the draft permit within 30 days after publication of the public notice.
- If the draft permit is substantially revised due to public comments, a revised draft permit will be issued and another public notice must be published.
- Hearings are conducted by the Florida Division of Administrative Hearings. A final permit will not be issued until the Administrative Law Judge issues a Recommended Order.





# Rights and Comments

- If the draft permit is not substantially revised and no hearing is requested, a proposed permit is sent to EPA for review. EPA has 45 days to provide comments or object to the permit.
- If EPA comments do not officially object to (veto) the proposed permit, a final permit is issued.
- The final permit may be appealed to a Florida District Court of Appeal. A Notice of Appeal must be filed within 30 days of issuing the final permit.
- Affected parties with standing have 60 days from the end of EPA's 45-day review period to petition the Administrator to object to the issuance of any Title V air operation permit.



Questions and Comments?



**Florida Department of Environmental Protection**

# Permit Applications

**David Read, P.E.**

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**October 25, 2017**





# Overview

- Application Types
- Application Submittal Process
  - EPSAP
  - Hardcopy
  - Attached to and email (**receipt request strongly recommended**)
  - Submittal time (after business hours & weekends)
- Pre-Application Meeting
- Application Structure
- Federal and State Rules and Regulations
- Emission Calculations
- Suggestions



# Application Types

- Air Construction Permits (**addressed here**)\*
  - Minor Permit
  - Major Permit
- Title V Air Operation Permit
- Air Operation Permit
- Federal Enforceable State Operation Permit (FESOP)
- Air General Permit

\* Presentation is structured for projects at existing facilities, however, most information still applicable to greenfield projects



# Application Submittal

- An application at a minimum is:
  - Department approved forms  
<http://www.dep.state.fl.us/air/rules/forms/application.htm>  
or
  - EPSAP
- Report supporting the application strongly recommended regardless of submittal method
- Pre-application meeting is usually helpful
- For simple projects, e.g., a permit extension, first 7 to 10 forms along with cover letter describing the request may suffice
- Try to submit applications during normal business hours



# Pre-Application Meeting

- Useful for most Projects, especially for:
  - RMRR\*
  - Controversial Projects
  - Emission Increase/PSD Applicability Issues
  - Adding an Emission Unit
  - New NSPS/NESHAP requirements
- Discuss what the Department Expects to see in the Application
  - Clear Description of Project with Timelines
  - Federal and State Rule Applicability Analysis
  - PSD Avoidance Analysis, if needed
  - Project Splitting, if needed
  - Contemporaneous Emission Increases/Decreases
  - etc.
- Timeline for Submittal
- Expectation of Permit Issuance

\* Discussion might be warranted even when no project is involved



# Application Structure

In general, an application should contain the following information, i.e., sections:

- Executive Summary
- Project description to include affected emission units
- Emission calculations
  - PSD applicability analysis (if needed)
- **Regulatory analysis**
- PSD analysis (if needed)
  - BACT determinations (technically feasible and cost)
  - Air dispersion modeling





# Executive Summary

The Executive Summary may include overviews of:

- Proposed project
- Air permitting rule applicability
- Application content and structure
- Project schedule



# Project Description

The project description may include:

- Purpose and scope
- Affect emission unit(s)
- For each emission units
  - Detailed description of changes
  - Affect on emissions
  - Process flow diagram
- Previous projects, if any, in contemporaneous period



# Emissions Summary and Calculations

The emission summary and calculations may include:

- Approach for each affected emission unit
- Derived emission factors for each emission units
- Calculated emission increases (**if applicable**)
  - For each affected emission unit
  - Overall increase from project
  - BAE vs PAE
  - Could have accommodated
  - New emission units (increase = PTE)
  - Netting
- Emission Calculation Tables



# Regulatory Applicability Analysis

The emission regulatory applicability analysis **may** include:

- New Source Performance Standards
- National Emission Standards for Hazardous Pollutants
- State Rules
- For each applicable regulation the following, if applicable, should be included in the application:
  - Emission Limits and Work Practice Standards
  - Compliance Provisions/Requirements
  - Testing Requirements, e.g., fuel monitoring
  - Notifications, Records and Reporting
  - Alternative Standards (**if applicable**)
  - Other requirements



# BACT Analysis, if needed

- BACT Approach
- Case-by-Case analysis
- Top Down approach
- Cost effectiveness
- Propose BACT based on cost and technical feasibility for each triggered pollutant
  - NO<sub>x</sub>
  - SO<sub>2</sub>
  - CO
  - PM/PM<sub>10</sub>/PM<sub>2.5</sub>
  - VOC
  - GHG, etc.



# Air Dispersion Modeling, if needed

- Modeling methodology
  - Class II area analysis
  - Class I area analysis
- Source impact analysis
  - Class II area modeling results
    - Significance impact analysis
    - NAAQS analysis
    - Increment analysis
  - Class I area modeling results
    - Significant impact analysis
    - Increment Analysis
    - AQRV Visibility and Deposition Analysis (if not screened out)



# Air Dispersion Modeling, if needed (concluded)

- Ozone analysis
- Secondary PM<sub>2.5</sub> analysis
- Additional impacts analysis
  - Growth
  - Soil, vegetation and wildlife



# Suggestions

- A clear and concise regulatory analysis will allow only applicable requirements to be included in a permit, which limits confusion with respect to compliance issues
- Applicant's are encourage to consult with DARM with respect to a New Source Review Reform (BAE vs PAE) analysis prior to application submittal
- Strongly encourage applicants to consult with DARM with regards to netting analysis prior to application submittal
- Realistic could of accommodated calculations, e.g., highest monthly boiler heat rate annualized not highest day or hour
- Clear emission calculations (tables, emission factors, baseline period, etc.) are critical along with realistic emission scenarios, e.g., 39 TPY of NO<sub>x</sub> when little actual increase is expected
- If unsure, consult with DARM on engine issues
- Be careful in claiming RMRR





# Suggestions (concluded)

- For all but the simplest projects, a pre-application meeting is encourage to ensure a good application and to minimize the chance of a RAI
- Remember permitting time clocks and comment/petition periods – allow adequate time for issuance of a final permit, i.e., don't submit an application 3 weeks before a final permit is required
- Keep in mind Time To Process (TTP)
  - By statute issuance or denial within 90 days of a complete application
  - Department internal goals strive to reduce TTP
  - Provide **realistic** project timeline in application, i.e., the Department wants to minimize TTP for every project but not at the expense of more time critical projects



# Permit Applications

## Questions and Comments?

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**Florida Department of Environmental Protection**

# **PSD Applicability Determinations**

**Presented by Scott M. Sheplak  
DEP, Division of Air Resources Management  
Office of Permitting and Compliance  
October 25, 2017**





# Overview

- When to include
- How to determine
- How to avoid
- What to include



“1<sup>st</sup> bite at the apple”



“2<sup>nd</sup> bite at the apple”

- PSD 101 (for “beginners”) & PSD 501 (“graduate level”)
- Chapter 62-212, F.A.C. is a must read
  - An “Applicability Test” is required in this rule



# When to include a PSD applicability analysis

- For air construction permits, should usually include
- If obvious that project has no appreciable impact on emissions, then detailed analysis probably not needed.
  - Should still be discussed, even if not in great detail
- **In an air construction permit application, include a quantitative PSD analysis**, unless it's obvious that it's not needed.



# How to determine - When does a project trigger PSD?

- New source with PTE greater than PSD major source threshold
  - 250 tpy of a PSD pollutant for most source types
  - 100 tpy of a PSD pollutant for the “list of 28”



- Major modification at an existing source  
40 CFR 52.21(b)(2)(i):

*Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase ... of a regulated NSR pollutant ...; and a significant net emissions increase of that pollutant from the major stationary source.

- At a PSD major source, a modification with an emissions increase, and net increase, greater than the SER triggers PSD.
- At a PSD minor source, a modification with a PTE increase greater than 250 tpy (or 100 tpy) triggers PSD.



# What is a significant increase?

At a PSD major source, a modification with an emissions increase, and a net emissions increase, greater than the SER triggers PSD.

Pollutant	SER (TPY)	Pollutant	SER (TPY)
CO	100	NO <sub>x</sub>	40
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	25/15/10	Ozone (VOC) <sup>2</sup>	40
PM <sub>2.5</sub> (NO <sub>x</sub> )	40	PM <sub>2.5</sub> (SO <sub>2</sub> )	40
Ozone (NO <sub>x</sub> ) <sup>2</sup>	40	SAM	7
SO <sub>2</sub>	40	Pb	0.6
Hg	0.1	GHGs	75,000 (CO <sub>2</sub> e) <sup>3,4</sup>

1. Excluding fluoride and pollutants specific to the Pulp and Paper industry, MWCs, MSW landfills.
2. Ozone (O<sub>3</sub>) is regulated by its precursors (VOC and NO<sub>x</sub>). PSD for PM<sub>2.5</sub> can be triggered by its precursors (NO<sub>x</sub> and SO<sub>2</sub>).
3. In making the CO<sub>2</sub>e calculation, the values listed in 40 CFR 98, Subpart A, Table A-1 are used to weight emissions by their respective Global Warming Potential (GWP). For example, the current GWP factors for four of the GHGs are: CO<sub>2</sub> = 1; CH<sub>4</sub> = 25; N<sub>2</sub>O = 298 and SF<sub>6</sub> = 22,800.
4. Project cannot trigger PSD based on GHGs alone. PSD review for GHGs applies only if the project already triggers PSD for another pollutant and the increase in GHG emissions is greater than the SER.

At a PSD minor source, a modification with a PTE increase greater than 250 tpy (or 100 tpy) triggers PSD.



# How do I calculate the increase due to the project? (Step 1)

Increase = (Projected Actual Emissions, PAE) -  
(Baseline Actual Emissions, BAE)

## Baseline actual emissions

- Average rate, in tpy, at which the unit actually emitted the pollutant
  - During any consecutive 24-month period selected by the owner operator
  - Within the 10-year period (5 years for EGUs) immediately preceding when the owner/operator begins actual construction of the project
  - This is entirely unrelated to the 5-year Title V permit term
  - Is adjusted downward to account for non-compliant emissions during the 24-month period
  - Is adjusted downward to account for new emission limits with the source must currently comply (e.g., Boiler MACT)
  - (If constructing new unit, BAE = 0)





# How do I calculate the increase due to the project? (Step 1)

Increase = (Projected Actual Emissions, PAE) -  
(Baseline Actual Emissions, BAE)

## Projected actual emissions

- The maximum annual emissions rate, in tons per year, expected to occur during any one of the **5 years** immediately after the change
  - **10 years** for units undergoing an increase in capacity or PTE
  - This is entirely unrelated to the 5-year Title V permit term
  - Takes into account many factors, such as:
    - Historical operational data
    - Expected business activity
    - Filings with regulatory authorities
    - Etc.

May exclude emissions due to “demand growth” that the unit “could have accommodated” during the baseline period



# “Could Have Accommodated”

- Essentially allows facility to bump up its BAE
- Rule 62-212.300(3)(a)1., F.A.C.:
  - May “exclude that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth”
- EPA guidance: may base on one month of operation during the 24-month baseline period
- Upper bound on (BAE + Excluded Demand Growth) is current PTE
- Must support with data and explanation in application



# Now what?

- Not major by Step 1? → Avoids PSD
- Emissions increase greater than SER? → Go to Step 2, for those pollutants with a significant increase in emissions



# How do I calculate the net emissions increase? (Step 2)

- 40 CFR 52.21(b)(2)(i):

*Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase ... of a regulated NSR pollutant ...; and a significant net emissions increase of that pollutant from the major stationary source.

- 62-210.200(189), F.A.C., “Net Emissions Increase”
  - Must include all contemporaneous and creditable increases and decreases
  - Contemporaneous: period from five years before construction commences to the date the increase occurs
  - Creditable: if it has not previously been relied on for netting
- For Step 2, increases are based on PTE, not PAE



# Netting example (Step 1)

- PSD major facility
- Adding a new boiler and shutting down three existing boilers
- New unit
  - PAE = PTE
  - BAE = 0
- Step 1: Significant increase for all pollutants
- Go to Step 2 for all pollutants

Pollutant	Boiler No. 9 PTE (tpy)	SER (tpy)
CO	1,884	100
NO <sub>x</sub>	472	40
VOC	236	40
PM <sup>a</sup>	151	25
PM <sub>10</sub>	133	15
PM <sub>2.5</sub>	126	10
SO <sub>2</sub>	283	40
SAM	23.1	7
GHGs	1,250,000	75,000



# Netting example (Step 2)

- Adding a new boiler and shutting down three existing boilers
- Two additional projects in contemporaneous period

Pollutant	Boiler No. 9 PTE (tpy)	Contemporaneous Changes		
		Boiler Nos. 1, 2, & 4 Shutdown (tpy)	Permit No. -056 (tpy)	Permit No. -054 (tpy)
CO	1,884	-4,490	1,790	1.01
NO <sub>x</sub>	472	-309	466	1.01
VOC	236	-1,890	668	3.17
PM <sup>a</sup>	151	-285	101	1.48
PM <sub>10</sub>	133	-267	78.2	1.35
PM <sub>2.5</sub>	126	-198	75.0	1.35
SO <sub>2</sub>	283	-23.6	488	-0.03
SAM	23.1	0.00	48.8	0.00
GHGs	1,250,000	-642,000	430,000	2,920



# Netting example (Step 2)

- Adding a new boiler and shutting down three existing boilers
- Two additional projects in contemporaneous period

Pollutant	Boiler No. 9 PTE (tpy)	Contemporaneous Changes			Net emissions increase (tpy)
		Boiler Nos. 1, 2, & 4 Shutdown (tpy)	Permit No. -056 (tpy)	Permit No. -054 (tpy)	
CO	1,884	-4,490	1,790	1.01	-818
NO <sub>x</sub>	472	-309	466	1.01	630
VOC	236	-1,890	668	3.17	-982
PM <sup>a</sup>	151	-285	101	1.48	-31.5
PM <sub>10</sub>	133	-267	78.2	1.35	-54.5
PM <sub>2.5</sub>	126	-198	75.0	1.35	4.4
SO <sub>2</sub>	283	-23.6	488	-0.03	747
SAM	23.1	0.00	48.8	0.00	71.9
<b>GHGs</b>	1,250,000	-642,000	430,000	2,920	1,041,000



# Netting example (Step 2)

- Adding a new boiler and shutting down three existing boilers
- Two additional projects in contemporaneous period

Pollutant	Boiler No. 9 PTE (tpy)	Contemporaneous Changes			Net emissions increase (tpy)	SER (tpy)	PSD triggered?
		Boiler Nos. 1, 2, & 4 Shutdown (tpy)	Permit No. -056 (tpy)	Permit No. -054 (tpy)			
CO	1,884	-4,490	1,790	1.01	-818	100	No
NO <sub>x</sub>	472	-309	466	1.01	630	40	Yes
VOC	236	-1,890	668	3.17	-982	40	No
PM <sup>a</sup>	151	-285	101	1.48	-31.5	25	No
PM <sub>10</sub>	133	-267	78.2	1.35	-54.5	15	No
PM <sub>2.5</sub>	126	-198	75.0	1.35	4.4	10	No <sup>b</sup>
SO <sub>2</sub>	283	-23.6	488	-0.03	747	40	Yes
SAM	23.1	0.00	48.8	0.00	71.9	7	Yes
GHGs	1,250,000	-642,000	430,000	2,920	1,041,000	75,000	Yes

<sup>a</sup> Values for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> include both filterable and condensable PM.

<sup>b</sup> PSD is triggered for PM<sub>2.5</sub> because the net emissions increase of NO<sub>x</sub> or SO<sub>2</sub> is greater than 40 tons per year.





# How to avoid - PSD synthetic minor limits

- Come from Step 1 of emissions increase calculation
- New facility:
  - Limit PTE to below major source threshold
- Existing PSD minor source:
  - Limit increase in PTE to below major source threshold
- Existing PSD major source:
  - Limit PTE so that PAE - BAE (- Excluded Demand Growth) is below Significant Emissions Rate
- Usually on a 12-month rolling basis
- Bearing in mind the uncertainty in measurements



# What to include & additional thoughts

- Clear explanation of calculations helps everyone!
  - Where do the emissions factors come from? (See Rule 62-210.370, F.A.C., for the hierarchy.)
  - What is your “worst case” that your PTE is based on? - - Use words.
  - What are the steps in your “could have accommodated” analysis? This is surprisingly easy to do incorrectly.
  - Helps avoid RAIs.
- It's much easier to read if important figures and tables are integrated with the narrative text, rather than attached to the end.
- We'd be happy to discuss your analysis with you before you submit your application.



# Questions & Answers

**?’s**



# Acknowledgement

This is practically the same presentation that was delivered by John Dawson, DEP-DARM-OPC at the Northeast Florida A&WMA Chapter/FSU College of Law event held in Tallahassee on May 11, 2017.