

How Title V and NSR Permitting Interact

Ariel Ramirez

NSR, Air Permits Division

Vasant Chaphekar, P.E.

Title V, Air Permits Division

**2019 Environmental Trade Fair
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Presentation Outline



Introduction



The Texas 2-Step

FOP



NSR



Comparison



FOP

NSR

Interaction

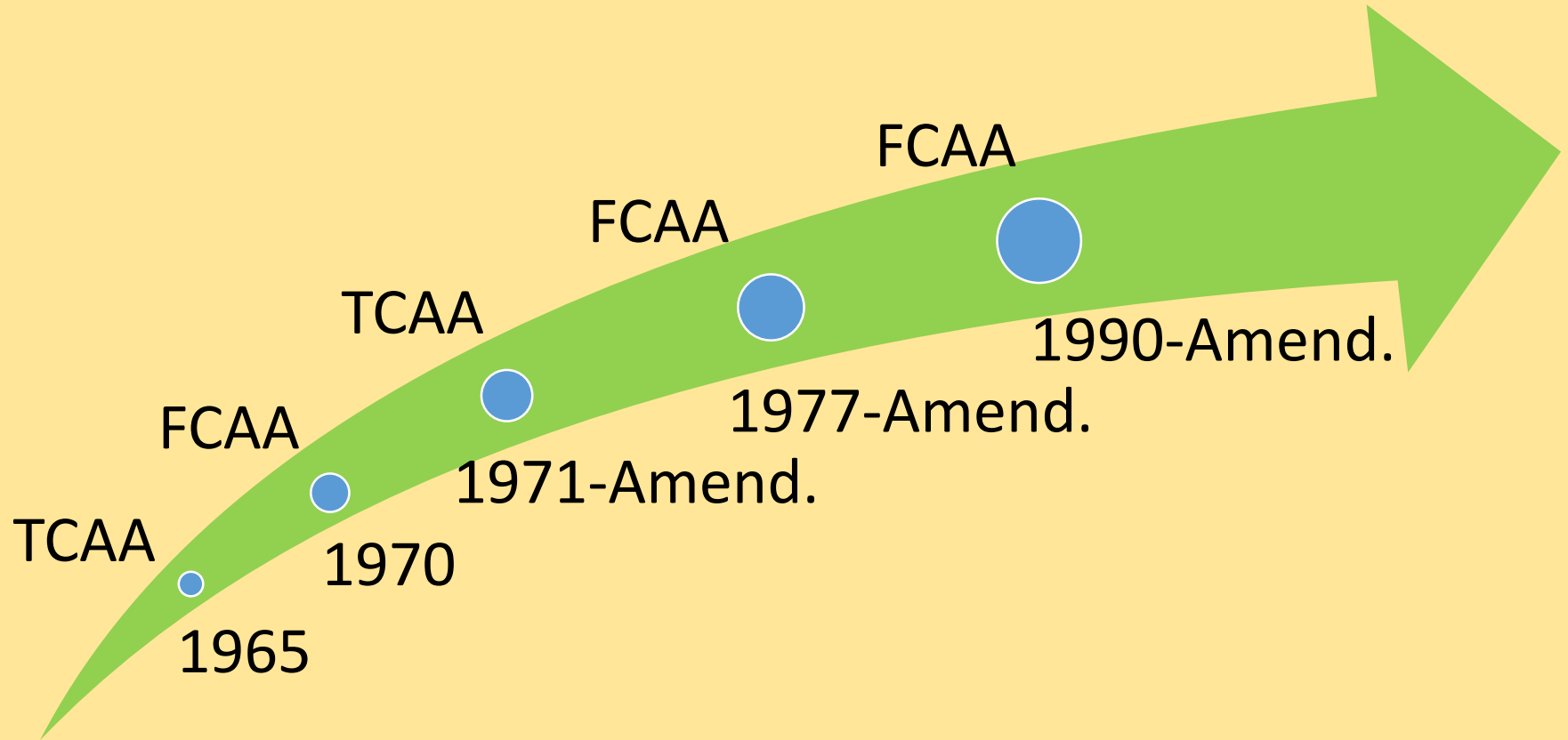


Examples



Summary

Air Permitting Timeline in Texas



The Texas 2-Step Permitting System

**Step 1: Construction Permit
New Source Review (NSR)**
[30 TAC §106](#) and [§116](#)



Step 2: Operating Permit*
Title V or Federal Operating Permit (FOP)
[30 TAC §122](#)

* FOP is required for all major sources and some non-major sources

NSR

FOP

Comparison

New Source Review (NSR)

- Authorizes facilities prior to construction
- Establishes maximum allowable emission rates
- Evaluates health impacts
- Conducts BACT review
- Evaluates federal applicability

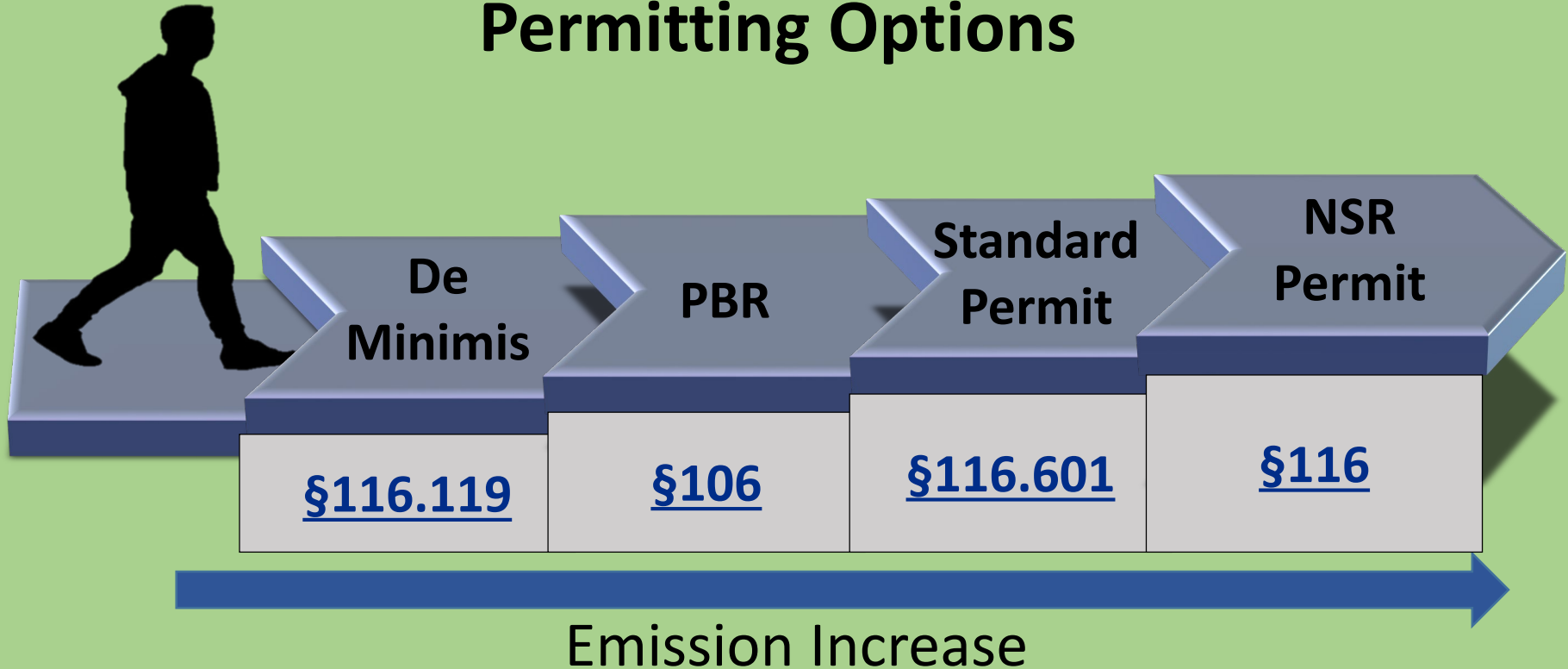


NSR

FOP

Comparison

Permitting Options



NSR

FOP

Comparison

What does a NSR Permit Contain?

Permit Face
with General
Conditions

Special
Conditions

Attachments

MAERT



NSR

FOP

Comparison

Federal Operating Permit (FOP)



- Codifies previously authorized air emissions
- Documents Applicable Requirements
 - Regulations and Monitoring/Testing, Reporting & Recordkeeping (MRRT)
 - May add Periodic Monitoring (PM) and Compliance Assurance Monitoring (CAM) if required
- Requires annual compliance certification

NSR

FOP

Comparison

What Does a Title V SOP Contain?

Permit
Face

Table of
Contents

Terms and
Conditions

Attachments

Appendices



NSR

FOP

Comparison

Permit Feature	FOP	NSR
Authorizes construction and air emissions?	No	Yes
Evaluates health effects and BACT?	No	Yes
Public notice requirements	1	Up to 2
Applies to all point source emissions in TX?	No	Yes
Can impose additional requirements on sources?	No#	Yes
Issued independently?	Yes*	Yes
Is one permit referenced in another?	Yes	No
Allows contested case hearings?	No	Yes
Annual permit compliance certification report?	Yes	No

Codifies existing applicable requirements but can add PM/CAM

* NSR permit referenced in FOP must be issued first

Example: Major Source Threshold Levels

Emission Source	FOP	NSR
Un-named* Source PTE ≥ 100 but < 250 tpy in Attainment Area	Major	Minor
Un-named Source PTE ≥ 250 tpy in Attainment Area	Major	Major
Any Source PTE \geq Threshold for NA Area Designation	Major	Major

* Source not listed in 30 TAC §122.10(13)(C) or 30 TAC § 116.164(a)(1)

Interaction

Examples

Summary

- Per §122.10(2), Applicable Requirements in a FOP include applicable NSR and PBR permits.
- The NSR and PBR permits are incorporated by reference (IBR) in the FOP to facilitate compliance and enforceability.



Interaction

Examples

Summary

If a major NSR site has a PSD/NA permit, then FOP must include:

- Major NSR Summary Table; and
- Copy of the PSD/NA NSR permit.



Example: New Source Review Authorization References in FOP

Prevention of Significant Deterioration (PSD) Permits



PSD Permit No.: PSDTX9999

Issuance Date: 05/01/2010

Title 30 TAC 116 Permits, Special Permits, and other Authorizations

Authorization No.: 99999

Issuance Date: 05/01/2010

Permits By Rule (30 TAC Chapter 106) for the Application Area

Number: 106.261

Version No./Date: 11/01/2003

Number: 106.262

Version No./Date: 11/01/2003

Example:

New Source Review Authorization References by Emission Unit in FOP

Unit/Group/Process ID	EU Name/Descriptor	NSR Authorization
BOIL-1	Boiler House 1	99999/PSDTX9999
ENGINE-1	Pump Engine	106.511/09/04/2000

Interaction

Examples

Summary

Incorporated by
Reference

**Title V
Permit**

* Applicable
Requirements

MACT*

PM/CAM*

SIP*

NSPS*

NESHAPS*

SP#*

NSR#*

PBR#*

Interaction

Examples

Summary

Incorporated by
Reference

**Title V
Permit**

* Applicable
Requirements

MACT*

SP#*

SP#*

PM/CAM*

NSPS*

NSR#*

SIP*

NSR#*

PBR#*

NESHAPS*

PBR#*

Interaction

Examples

Summary

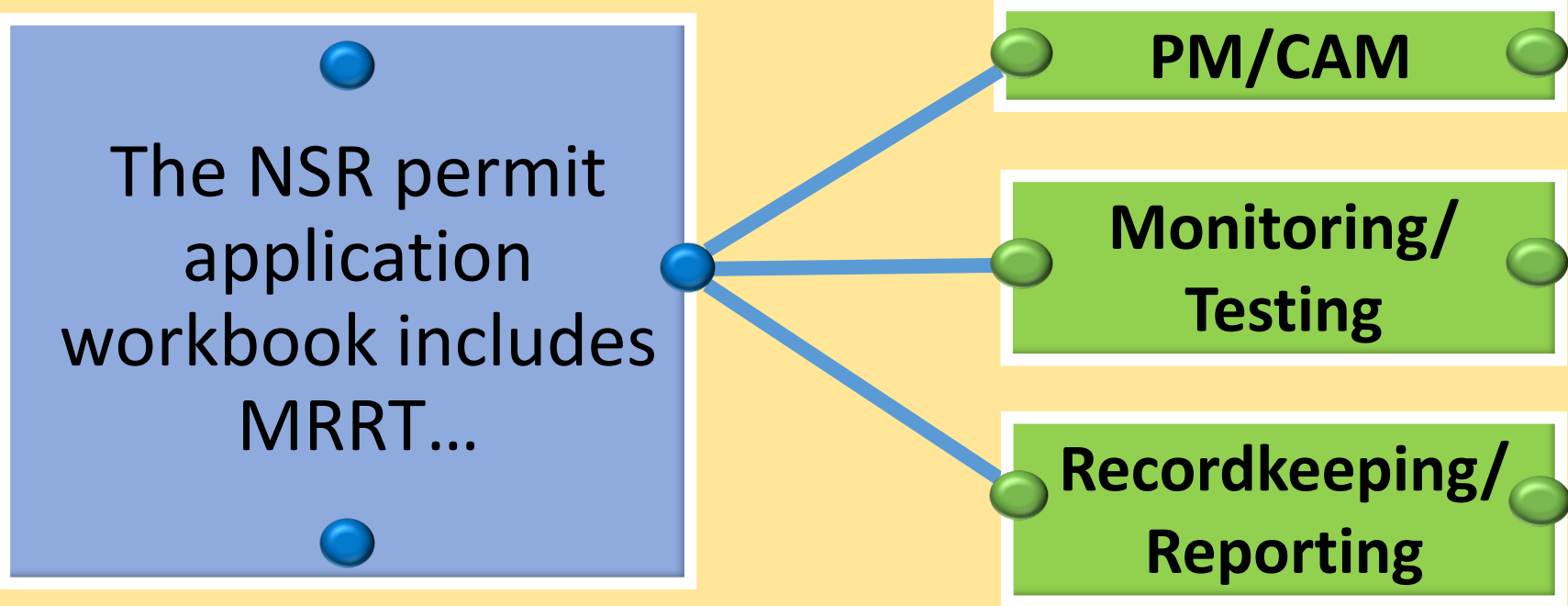
MRRT type requirements under Title V may also be included in NSR permits



**CAM TESTING
REPORTING
RECORDKEEPING
PM**

NSR Workbook and Title V

The NSR permit
application
workbook includes
MRRT...



```
graph LR; A[The NSR permit application workbook includes MRRT...] --- B[PM/CAM]; A --- C[Monitoring/Testing]; A --- D[Recordkeeping/Reporting];
```

The diagram illustrates the components of the NSR permit application workbook. A central blue box on the left contains the text 'The NSR permit application workbook includes MRRT...'. Three blue lines radiate from a central blue dot on the right side of this box to three green boxes on the right. Each green box contains a component: 'PM/CAM', 'Monitoring/Testing', and 'Recordkeeping/Reporting'. Each green box is decorated with two green circular dots, one at the top and one at the bottom.

PM/CAM

**Monitoring/
Testing**

**Recordkeeping/
Reporting**

Major NSR Summary Table in FOP

EPN

**Source
Name**

**Air Contaminant
Name**

**Emission
Rates**

Permit Number: 9999-9999

Issuance Date: 05/01/2010

Emission Point Number	Source Name	Air Contaminant Name	Emission Rates		Monitoring/ Testing Req.	Recordkeeping Req.	Reporting Req.
			lb/hr	TPY	Spec. Cond.	Spec. Cond.	Spec. Cond.
BOIL- Y1801	30-Barg Boiler	NOx	1.99	8.72	3, 24, 26, 32	3, 24, 26, 32	3, 24, 26
		SO2	0.29	1.28	24	3, 24	3, 24
		CO	13.93	30.5	24, 26, 32	24, 26	24, 26
		PM	1.54	6.76	21, 24	3, 24	3, 24
		VOC	1.09				

MAERT

**MRRT Requirements Referencing
NSR Special Conditions**

FOP and NSR Project Terminology

Permit Action	FOP Project Type	NSR Project Type
Initial permit issuance	Initial	Initial
Changes/ Modifications	Notification Admin. Revision Minor Revision Significant Revision	Alteration Amendment Changes to Qualified Facilities
Permit renewal	Renewal	Renewal Renewal Certification
Expedited actions	Expedited	Expedited

Changes to Permits (Site is a Minor NSR source)

Change in process,
operation, control,
equipment or regulation



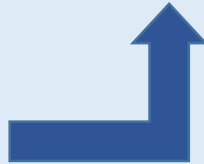
FOP Change

- Administrative, minor, or significant change
- NSR alteration or amendment issued?



NSR Permit Change

- Alteration, amendment, or major source?



Changes to Permits (Site has a PSD/NA permit)

Change in process,
operation, control,
equipment or regulation



NSR Permit Change

Alteration, amendment,
or major modification



FOP Change

- Administrative, minor, or significant change
- NSR alteration or amendment or PSD/NA revised version issued?
- Changes to Major NSR Summary Table?





Changes to Permits (Site has a PSD/NA permit)

**EPA or
Public Comments
Asserting FOP Deficiency**



Potential FOP Change

- Improved monitoring 
- Improved demonstration of compliance
- Changes to NSR Permit?

NSR Permit Change
Alteration or amendment
to address potential NSR
deficiency 



Example: New Source Review Authorization References in FOP

Prevention of Significant Deterioration (PSD) Permits

PSD Permit No.: PSDTX9999

Issuance Date: 05/01/2019

Title 30 TAC 116 Permits, Special Permits, and other Authorizations

Authorization No.: 99999

Issuance Date: 05/01/2019

Permits By Rule (30 TAC Chapter 106) for the Application Area

Number: 106.261

**New Revision
Date**

Version No./Date: 11/01/2003

Number: 106.262

Version No./Date: 11/01/2003

Interaction

Examples

Summary

New Site

**PBR
authorization**

Minor NSR Site

**Alteration or
amendment**

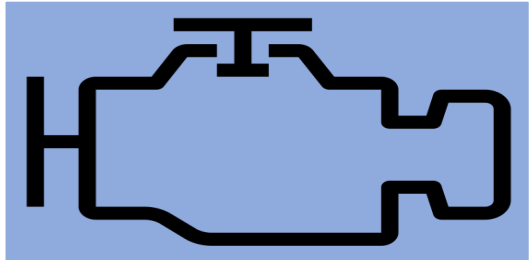
Major NSR Site

**Modification to
PSD/NA permit**

How do NSR permit actions affect FOP?

How do FOP actions affect NSR?

Example: New Site – Attainment Area



**ENGINE
> 240 HP**

PBR 106.512 (Registered Y/Certified N)

Actual NO_x = 50 tpy

**Based on available info,
is site subject to TV? (T/F)**



Example: New Site – Attainment Area

Impact on NSR and FOP Permitting

- NSR – No impact under Chapter §116
- Applicant may consider submitting PI-7-CERT or APD-CERT form to certify PTE of NO_x emission sources is < 100 tpy to avoid FOP trigger; or
- Submit initial application for a FOP

Example: New Site – Attainment Area

When to Submit an Application

- NSR – before construction begins; construction cannot occur until the permit is issued
- FOP – before operation begins

Example: Minor NSR Site

Un-named Source - Attainment Area - NOT Previously Subject to TV



Throughput increase

NO_x increased from 50 tpy to 100 tpy

Subject to PSD review? (T/F)

F

Subject to TV? (T/F)

T

Example: Minor NSR Site

Un-named Source - Attainment Area - NOT Previously Subject to TV

Impact on NSR and FOP Permitting

- NSR – File an amendment to revise NSR
- Not a major modification
- Submit initial application for a FOP

Example: Minor NSR Site

Un-named Source - Attainment Area - NOT Previously Subject to TV

When to Submit an Application

- NSR – before construction begins; construction cannot occur until the permit is issued
- FOP – before operation begins

Example: Minor NSR Site

Un-named Source - Attainment Area - Subject to TV



Throughput increase

NO_x increased from 50 tpy to 100 tpy

Update NSR and FOP? (Y/N)

Y

Type of FOP revision?
Admin./Minor/Significant

Minor

Example: Minor NSR Site
Un-named Source - Attainment Area - Subject to TV

Impact on NSR and FOP Permitting

- NSR – File an amendment to revise NSR
- Not a major modification
- FOP – Submit a FOP minor revision application upon issuance of NSR amendment

Example: New Source Review Authorization References in FOP

Title 30 TAC 116 Permits, Special Permits, and other Authorizations

Authorization No.: 99999

Issuance Date: 05/01/2019

Permits By Rule (30 TAC Chapter 106) for the Application Area

Number: 106.261

Version

01/01/2003

Number: 106.262

Version

01/01/2003

**New Revision
Date**

Example: New Source Review Authorization References

When to Submit an Application

- NSR – before construction begins; construction cannot occur until the permit is issued.
- FOP – before operation begins; can operate the unit before FOP is issued

Example: Minor NSR Site

HGB/DFW Area – Site was NOT Subject to TV



Throughput increase

NO_x increased from 45 tpy to 150 tpy

Subject to PSD/NA review? (T/F)

T

Subject to TV? (T/F)

T

Example: Minor NSR Site

HGB/DFW Area - Site was NOT Subject to TV

Impact on NSR and FOP Permitting

- NSR – File an amendment to revise NSR
- Major modification project
 - Submit NA permit application
- Submit initial FOP application upon issuance of NA permit
- Include Major NSR Summary Table in FOP

Example: Minor NSR Site

HGB/DFW Area - NOT Previously Subject to TV

When to Submit an Application

- NSR – before construction begins; construction cannot occur until the permit is issued.
- FOP – upon issuance of the NSR NA permit and before operation begins; can operate the unit before FOP is issued

Example: Major NSR Site

Site is Subject to TV



Add new units and throughput increase

Major modification project

New or Updated NSR/PSD/NA permit
version

Type of FOP revision - Minor/Significant?

Significant

Example: Major NSR Site

Site is Subject to TV

Impact on NSR Permitting

NSR – File an amendment to revise NSR

- Major modification project
- Submit NA application
- Revise version number of NA permit

Example: Major NSR Site

Site is Subject to TV

Impact on FOP Permitting

FOP - Submit a FOP significant revision application

- Revise or add Major NSR Summary Table in FOP
- Revise or add version number of NSR/PSD/NA permit in FOP table

Example: Major NSR Site

Site is Subject to TV

When to Submit an Application

- NSR – before construction begins; construction cannot occur until the permit is issued.
- FOP – before operation begins
 - No TV authorization to operate unit until FOP is issued
 - No public notice until NSR NA permit is issued

Example: Major NSR Site

Site is Subject to TV



Add new units and throughput increase

Minor modification project

Update NSR/PSD/NA permit

Minor

Type of FOP revision - Minor/Significant?

Example: Major NSR Site

Site is Subject to TV

Impact on NSR/PSD/NA Permit

NSR – File an amendment to revise NSR

- **Revise Special Conditions**
- **Revise MAERT**
- **No change in NSR/PSD/NA permit version**

Example: Major NSR Site

Site is Subject to TV

Impact on FOP Permitting due to NSR Action

FOP - Submit a FOP minor revision application upon issuance of NSR /PSD/NA amendment

- Revise Major NSR Summary Table in FOP
- Revise or add issuance date of NSR/PSD/NA permit in FOP table

Example: Major NSR Site

Site is Subject to TV

When to Submit an Application

- NSR – before construction begins ;
construction cannot occur until the
permit is issued
- FOP – before operation begins

Example: Major NSR Site

Site is Subject to TV



FOP Receives EPA or Public Comments

Asserted Deficiencies in NSR/PSD/NA

**Asserted Insufficiency in Demonstration
of Compliance with Emission Limits**

**May Require NSR Revision –
Alteration/Amendment?**

Example: Major NSR Site

Site is Subject to TV

Changes in NSR/PSD/NA Permit

- Revise Special Conditions - including monitoring, testing, recordkeeping and reporting
- Addition of PM/CAM requirements to permit

NSR WORKBOOK!

Example: Major NSR Site

Site is Subject to TV

Changes to the FOP

- May require minor or significant revision to SOP
- Revise Major NSR Summary Table (if needed)
- Revise NSR/PSD/NA issuance date

Example: Major NSR Site

Site is Subject to TV

When to Submit an Application

- NSR – before construction begins ;
construction cannot occur until the
permit is issued
- FOP – before operation begins

Interaction

Examples

Summary

- NSR and Title V – Separately issued permits but need to be synchronized
- Interaction – Change in NSR permit causes a change in the FOP; Public/EPA comment related FOP changes may drive an NSR change
- Site/Permit Interaction – Permit revision process

Thank You!

APD Contacts

Ariel Ramirez

Ariel.Ramirez@tceq.texas.gov

Vasant Chaphekar, P.E.

Vasant.Chaphekar@tceq.texas.gov

General

airperm@tceq.texas.gov

(512) 239 -1250

