



Introduction to Federal Operating Permits (Title V) with Updates

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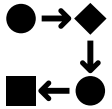
Air Permits Division

Environmental Trade Fair 2022

Title V Permitting Overview



Who needs a Title V permit?



What is the Title V permitting process?



Recent Updates



Why is a Title V Permit Needed?

- **Title V requirements**
 - Established by FCAA Amendments of 1990
- **Two types of air permits issued by TCEQ:**
 - New Source Review (NSR) and Title V (FOP)
- **Title V permits include:**
 - Site Operating Permit (SOP)
 - General Operating Permit (GOP)

What does a Title V permit provide?

- **Documents Applicable Requirements for units**
 - Codifies previously authorized air emissions from units
 - Includes state and federal regulations for air emissions
 - Monitoring/testing, recordkeeping & reporting (MRRT)
 - Additional periodic monitoring (PM) and compliance assurance monitoring (CAM) if required
- **Public notification and participation**
- **Permit compliance certification (PCC) and deviation reporting**

Who Needs a Title V Permit?

- Major Sources
- Other Sources



Major Sources

- Major Sources [30 TAC § 122.10(13)]
 - ≥ 100 TPY for a regulated pollutant
 - ≥ 25 TPY total hazardous air pollutants (HAPs)
 - ≥ 10 TPY single HAP
- Lower thresholds for nonattainment areas



Other Sources

- **“Affected Sources” under acid rain rules**
- **Solid waste incineration units**
- **Specific non-major sources listed by EPA**



Introduction to SOPs

True or False?

A site with no HAP emissions had PTE ≥ 100 tpy for a regulated pollutant. Site has recently established federally enforceable emissions < 100 tpy. The site can opt to void their SOP.

T

All minor sources are exempt from Title V requirements.

F

PCC submittal is not required once an application to void a Title V permit is submitted.

F

Introduction to SOPs (Continued)

True or False?

A site can have multiple SOPs but can designate only one Responsible Official (RO) per SOP.

T

A Title V permit action can lower a previously authorized emission limit for a unit.

F

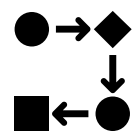
To be listed in a Title V permit an emission unit must be subject to a state/federal rule or have been granted a permit shield.

T

Title V Permit Overview



Who needs a Title V permit?



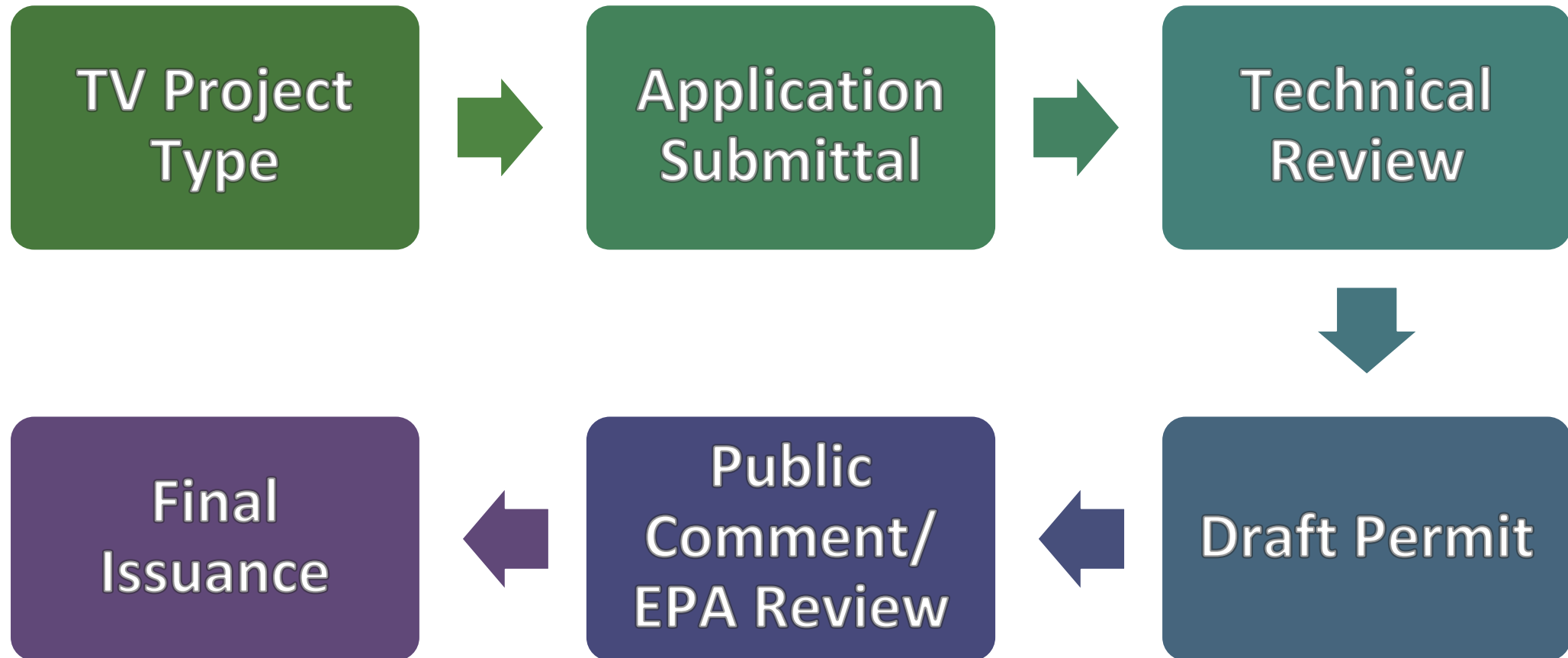
What is the Title V permitting process?



Recent Updates

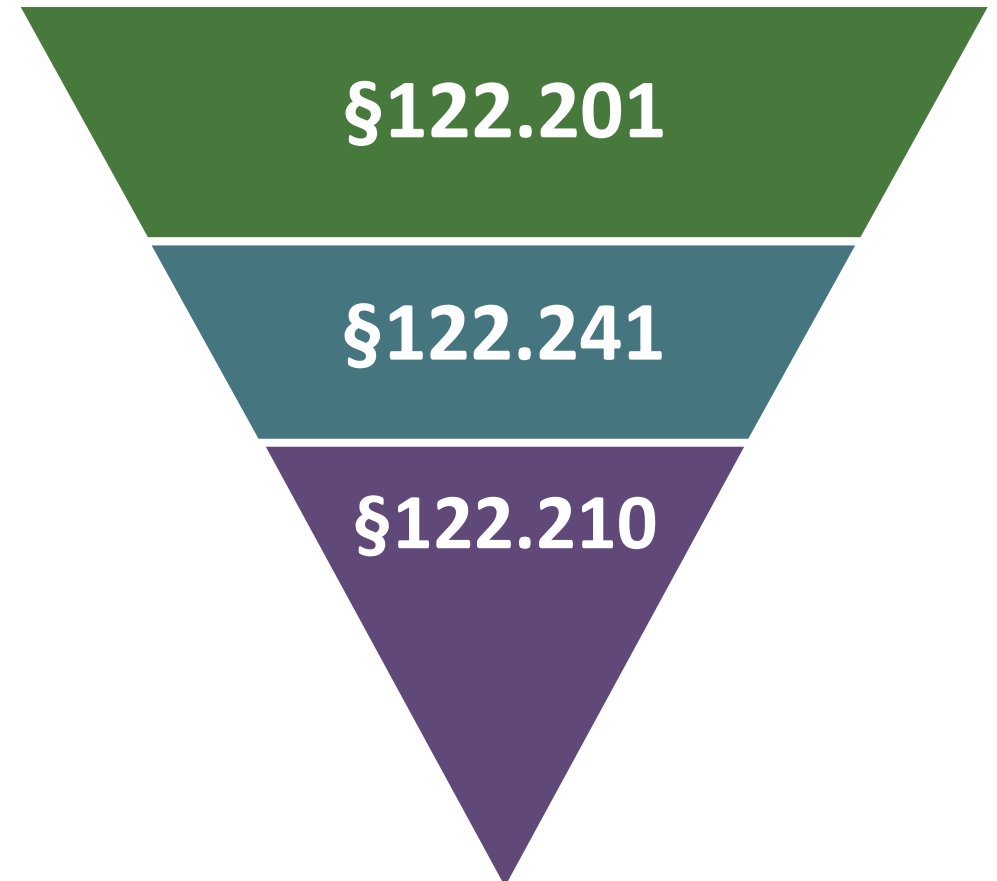


Permitting Process



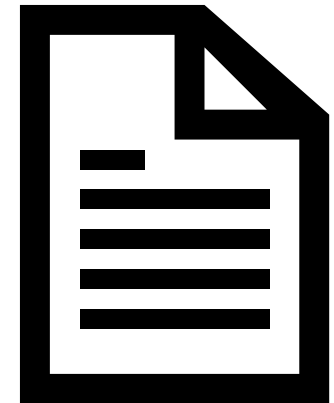
Project Types

- **Initial:** New Title V permit
- **Renewal:** Every 5 years for effective Title V permits
- **Revisions:** Changes to an existing Title V permit



SOP Document

- **Permit face**
- **General terms and conditions**
- **Special terms and conditions**
- **Attachments**
- **Appendices**





SOP Attachments

Applicable Requirements Summary

Additional Monitoring Requirements (PM/CAM)

Permit Shield(s)

New Source Review (NSR) Authorization References

Compliance Schedule(s)

Alternative Requirement(s)

SOP Sections & Forms

Permit Face.....

Terms and Conditions.....

Applicable Requirements.....

PM / CAM.....

Permit Shield.....

.....OP-1, OP-2, Core Data

.....OP-REQ1

.....OP-SUM/R, OP-UA forms

.....OP-MON

.....OP-REQ1, OP-REQ2

SOP Sections & Forms (Cont.)

PSD/NA/GHG/NSR/PBR ...

Compliance Schedule.....

Alternative Requirement.....

Major NSR Summary Table..

.....OP-REQ1, OP-SUM/R

.....OP-ACPS

.....OP-REQ1

.....NSR Permits

OP-REQ1 Form

- **Special Terms and Conditions**
 - Site-Wide requirements for permitted area
 - State & federal regulations for air emissions
 - Acid rain, cross-state air pollution rule (CSAPR) and Texas SO₂ trading program
- **NSR Authorizations**



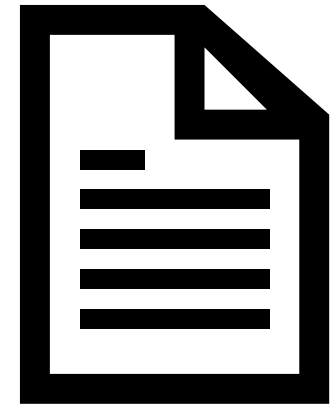
OP-REQ1 Form (Contd.)

- **Initial and renewal applications - required**
- **Revision applications – only if site-wide requirements change in the permitted area**
- **Answer ALL questions for SOP applications, unless instructions indicate otherwise**
- **Use most recent version of form**



Overview of SOP Attachments

- **Applicable Requirements Summary**
- Additional Monitoring
- Permit Shields
- NSR Authorizations

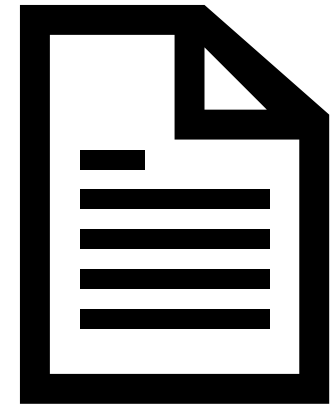


Applicable Requirements: OP-UA Forms

- **Submit forms for initial, renewal, and revision applications**
- **There are 63 types of unit-specific OP-UAXX forms and a generic OP-UA1 form**
- **Follow all form instructions**
- **Check form date to verify most recent version is used**

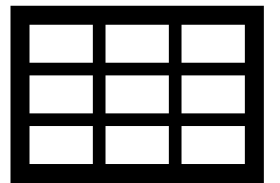
Overview of SOP Attachments

- Applicable Requirements
- **Additional Monitoring**
- Permit Shields
- NSR Authorizations



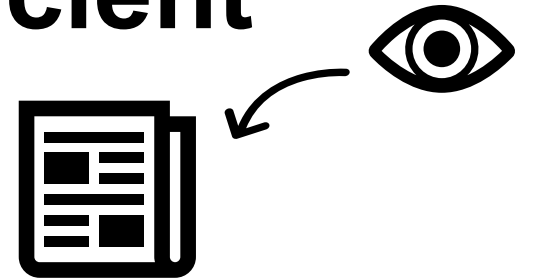
Additional Monitoring: OP-MON Forms

- **Evaluate monitoring for initial, renewal, and revision applications**
- **Evaluate monitoring on a rule-by-rule and pollutant-by-pollutant basis**
- **Periodic monitoring (PM) guidance**
- **Compliance assurance monitoring (CAM) guidance**



Periodic Monitoring (PM)

- Does the rule specify monitoring?
- Does the rule also specify “sufficient” monitoring *frequency*?



- If ‘NO’ to either of the above, then Periodic Monitoring is required

Compliance Assurance Monitoring (CAM)

- Is the unit subject to an emission limit or a standard?
- Is the unit using a control device to achieve compliance with the emission limit or standard?
- Is the unit a major source PRE-control?
- If 'YES' to ALL of the above, then CAM is required**



** Certain exemptions to CAM requirements exist

Example 1: PM Determination

- Continuous process vent with direct flame incinerator

- Is PM needed?

MACT FFFF

**Proposed after
11/15/90**

Satisfies CAM

**Chapter 115
Vent Gas Control**

**Continuous
temperature
monitoring**

Satisfies PM

Example 2: CAM Determination

- Continuous process vent with direct flame incinerator

- Meets criteria for large CAM unit.
- Is CAM required?

MACT FFFF

**Proposed after
11/15/90**

Satisfies CAM

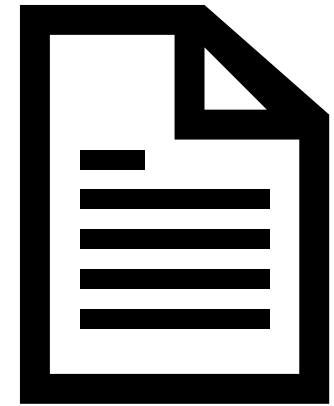
**Chapter 115
Vent Gas Control**

**Continuous
temperature
monitoring**

**Lacks minimum
frequency for
large CAM units**

Overview of SOP Attachments

- Applicable Requirements
- Additional Monitoring
- **Permit Shields**
- NSR Authorizations



Permit Shields

- **Permit shields document negative applicability**
 - Requested on OP-REQ1
 - Documented on OP-REQ2
 - May be granted for potentially applicable regulations only
 - Regulatory basis where an emission unit is not subject to a regulation
- **Permit shields are considered for initial, renewal, and significant revision applications**
- **May be documented in a minor revision application, but a permit shield may not be granted**

Example - OP-REQ2 Form

- §63.400(a): New and existing cooling towers (CT) operated with chromium-based water treatment chemicals
- OP-REQ2: “CT is not operating with chromium-based water treatment chemicals.”

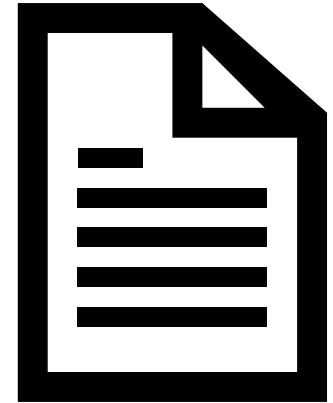


- Reasoning should match language in rule



Overview of SOP Attachments

- Applicable Requirements
- Additional Monitoring
- Permit Shields
- **NSR Authorizations**



NSR Authorization References

- Incorporated by reference in OP-REQ1 form
 - Major NSR Authorizations (Title I – PSD/NA/GHG)
 - Minor NSR Authorizations (30 TAC Chapter 116)
 - Permits-by-Rule (30 TAC Chapter 106)
- NSR authorizations must be effective for Title V public notification and permit issuance

NSR Authorization References by Emission Unit

- **OP-SUM and OP-SUMR forms**
- **Each unit must have an authorization**
 - **Minor NSR permit**
 - **Major NSR permit**
 - **Standard permit**
 - **Permit-by-rule**

Appendices

- **Appendix A - Acronym List**
- **Appendix B - Major NSR Summary Table for NSR PSD/NA/GHG permits**

Appendix B:

Major NSR Summary Table

- **Incorporated by Reference (IBR)**
- **TCEQ formats table based on NSR MAERT**
- **Applicant identifies MRRT requirements from NSR permit special conditions (SCs) or enforceable application representation**
- **TCEQ reviews requirements and appends to SOP**

Appendix B: Example Major NSR Summary Table

Permit Number: 99999/PSDTX888			Issuance Date: February 28, 2017		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements
			lbs/hour	TPY(4)	Spec. Cond.
Turbine and Duct Burner During Normal Operation					
GT-HRSG No. 1	Turbine/HRSG No. 1	NOx	154.0	---	2, 10, 11, 12, 18

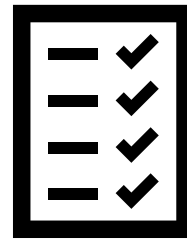
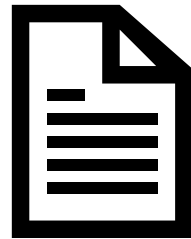
**NSR
MAERT**

**NSR
SCs**

Working Draft Permit (WDP)

TCEQ Permit Reviewer

- Send deficiencies
- Review responses
- Prepare WDP
- Prepare PA/PNAP



Applicant

- Address deficiencies
- Provide appropriate forms
- Review WDP
- Certify updates prior to PA/PNAP

Public Notification

Public Notice

- Initial, Renewal, Significant Revision
- Applicant publishes notice
- 30-day public comment period
- 45-day EPA review starts after notification of publication

Public Announcement

- Minor Revision
- TCEQ posts online
- 30-day public comment period
- 45-day EPA review starts with public comment period

EPA Review

- **45-day review is concurrent with public notice or public announcement**
- **Stops if comments are received**
- **Begins again after comments are addressed**



Final Action – Next Steps

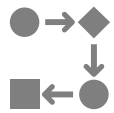
- **TCEQ issues permit**
- **60-day public petition period**
 - **EPA may receive petition to object to issued permit**
 - **EPA may grant or deny the petition**
 - **TCEQ works with applicants to resolve granted objection items**
 - **Permit, permit record, or both may be modified**



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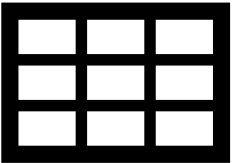


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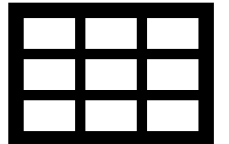
Issues Having an Impact on Title V Permitting Process

- **As of August 2020, for PBRs listed in SOPs**
 - Include OP-PBRSUP table
- **Since June 2021, EPA has issued 9 new orders out of which 1 order has been resolved**
 - Ongoing discussions between EPA, TCEQ and applicants on implementation of pending orders



Permit By Rule (PBR) Supplemental Table

- **OP-PBRSUP table includes**
 - Registered PBRs (Table A), Claimed (not-registered) PBRs for each unit (Table B), and Claimed (not-registered) PBRs for insignificant sources (Table C)
 - Monitoring requirements for PBRs are listed in Table D
- **OP-PBRSUP table is a part of a Title V permit record and is cross-referenced in the SOP and SOB**



EPA Orders

- **Ongoing discussions on the following NSR permitting issues:**
 - Determining sufficiency of NSR monitoring requirements in NSR permits
 - Determining sufficiency of PBR monitoring requirements in PBRs
 - Use of confidential business information (CBI) in NSR permits in enforcing permit terms or emission limits



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