

# Site Operating Permits (SOPs)

## Initial, Revision, and Renewal Applications

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2019 Environmental Trade Fair & Conference

# Title V Permitting Overview

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- Who needs a Title V permit?
- What is the Title V permitting process?
- Where do I access Title V permit documents?



# Who Needs a Title V Permit?

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- Major Sources
- Other Sources



# Major Sources

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- Major Sources as defined by 30 TAC §122.10
  - $\geq 100$  TPY PTE
  - $\geq 25$  TPY total HAPs
  - $\geq 10$  TPY single HAP
- Lower thresholds for nonattainment areas



# Other Sources

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



# Title V Permit Overview

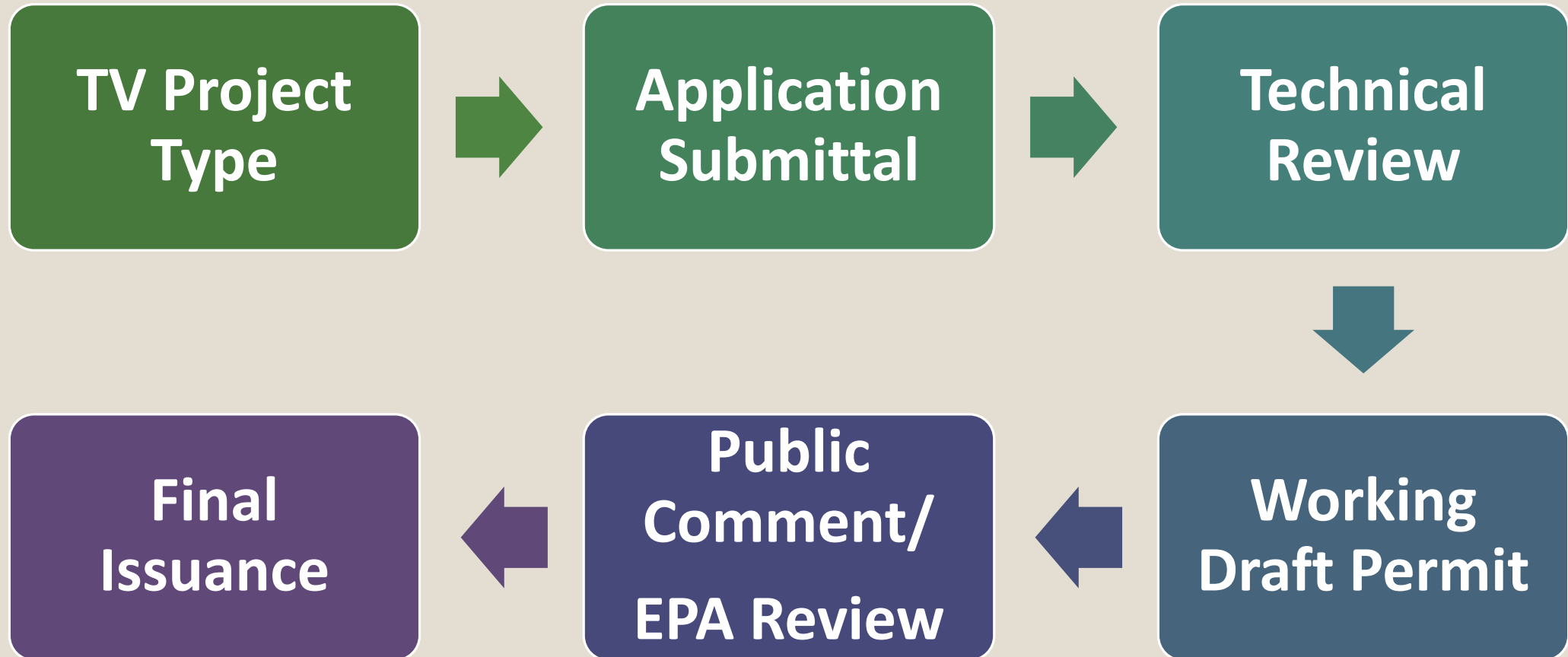
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- Who needs a Title V permit?
- **What is the Title V permitting process?**
- Where do I access Title V permit documents?



# Permitting Process

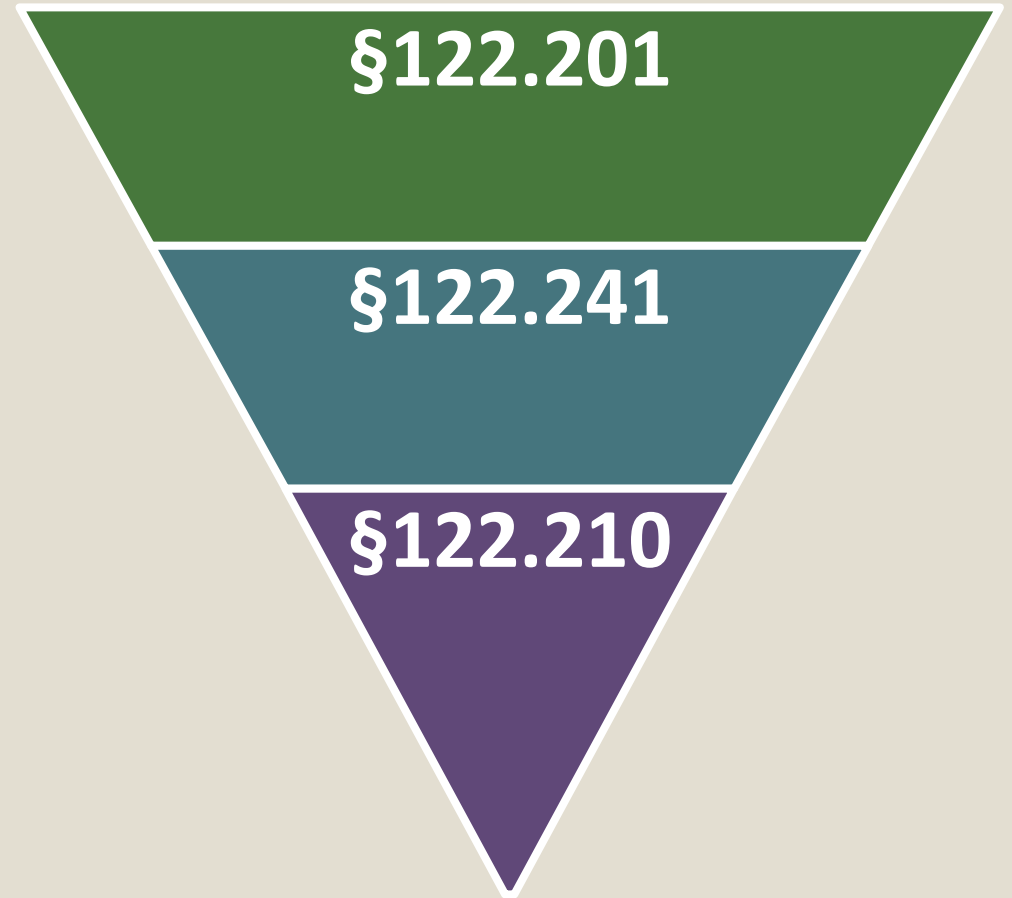
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# Project Types

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



# Application Due Dates

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## Initial

- Before site operation begins

## Renewal

- 6 – 18 months before permit expiration

## Revisions

- **Minor** – Before operation of change
- **Significant** – Before operation of change

# Operating Changes in Permit Application

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## Initial

- Date application is submitted

## Renewal

- **Minor** – After completed application is submitted
- **Significant** – After TCEQ issues revised permit

## Revisions

- **Minor** – After completed application is submitted
- **Significant** – After TCEQ issues revised permit

# Example: Timely Renewal Submittal

Permit Renewal Submitted:

- 10/01/2023

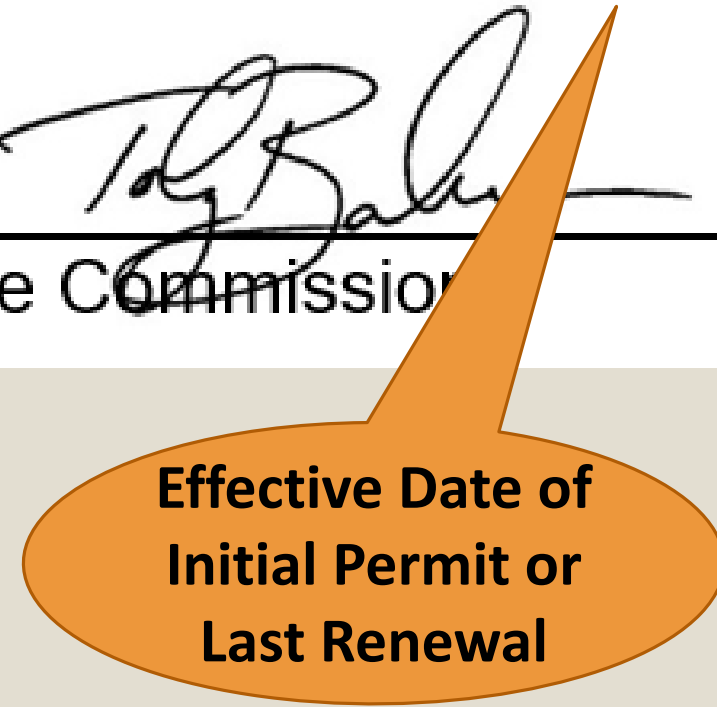
Is the renewal timely?

- No
- 09/25/2022 – 09/25/2023
- Initial may be required

Issuance Date: March 25, 2019



For the Commissioner



**Effective Date of  
Initial Permit or  
Last Renewal**

# SOP Content

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- Permit Face
- General Terms and Conditions
- Special Terms and Conditions
- Attachments
- Appendices

# OP-REQ1 Form

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- General Terms and Conditions
- Special Terms and Conditions
  - State Site-Wide
  - Federal Site-Wide
  - Acid Rain
  - CSAPR
  - NSR Authorizations

# OP-REQ1 Form

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- Initial and renewal applications - required
- Revision applications – only if site-wide changes
- Answer ALL questions for SOP applications, unless instructions indicate otherwise
- Check form date



**Check form  
footer for date**

**TCEQ – 10043 (APDG 5733v44, Revised 03/19) OP-REQ1**

# Example:

## 30 TAC Chapter 111 Vents

A. Visible Emissions
1. The application area includes stationary vents constructed on or before January 31, 1972.
2. The application area includes stationary vents constructed after January 31, 1972. <i>If the responses to Questions I.A.1 and I.A.2 are both “NO,” go to Question I.A.6.</i> <i>If the response to Question I.A.1 is “NO” and the response to Question I.A.2 is “YES,” go to Question I.A.4.</i>

Prompts to  
skip forward

# Example:

## Special Terms and Conditions

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Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
  - (i) Title 30 TAC Chapter 111(a)(1)(B) (relating to Requirements for Specified Sources)

**Determined by OP-REQ1**  
**Questions 1 - 4**

# Attachments

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- Applicable Requirements
- Additional Monitoring
- Permit Shield
- NSR Authorizations
- Appendix B

# Applicable Requirements: OP-UA Forms

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- Submit for initial, renewal, and revision applications
- 63 unit-specific forms and generic OP-UA1 form
- Follow all form instructions
- Check form date to verify most recent



**Check form  
footer for date**

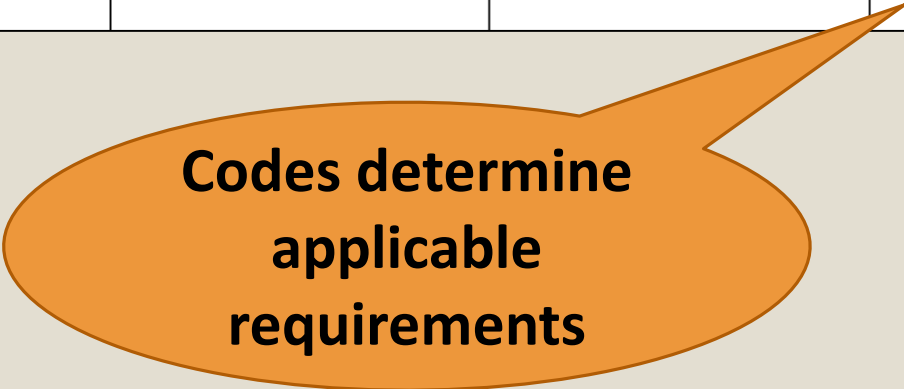
**TCEQ-1003 (APDG 5702v29, Revised 12/18) OP-UA2**

# Example:

## OP-UA2 MACT ZZZZ Engines

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HAP Source	Brake HP	Construction/ Reconstruction Date	Nonindustrial Emergency Engine	Service Type	Stationary RICE Type
AREA	250-300	02-06	NO	NORMAL	4SRB



Codes determine  
applicable  
requirements

# Example:

## OP-UA2 Requirements

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SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)
63ZZZZ-3	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.10 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j)	For each existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP, located at an area source, you must comply with the requirements as specified in Table 2d.10.a-c.

# Example:

## Forms for SOP Renewal

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- Permit Renewal Issued 11/25/2014
- No changes at site, no OP-UA forms submitted

Is this acceptable?

- Maybe: MACT ZZZZ updated 02/27/2014, OP-UA2 updated 12/2018, and flowchart updated 02/20/2018

# Attachments

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- Applicable Requirements
- **Additional Monitoring**
- Permit Shield
- NSR Authorizations
- Appendix B

# Additional Monitoring: OP-MON Forms

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- Evaluate for initial, renewal, and revision applications
- Rule-by-rule, pollutant-by-pollutant
- APDG 5241: Periodic Monitoring
- APDG 5824: Compliance Assurance Monitoring

# Periodic Monitoring

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- Does the rule contain sufficient monitoring?
- Does the rule have sufficient monitoring frequency?
- If 'NO' to either of the above, then Periodic Monitoring is required

# Example: Periodic Monitoring

- F. Compliance with subparagraphs (A)-(C) of this paragraph shall be determined using the following test methods, as appropriate. The highest reading of the test methods shall determine compliance with the appropriate visible emission limit:
- i. CEMS as described in subparagraph (D) of this paragraph;
  - ii. Test Method 9 (40 CFR 60, Appendix A);
  - iii. Alternate Method 1 to Method 9, Light Detection and Ranging (40 CFR 60, Appendix A); or
  - iv. equivalent test method approved by the executive director of the Texas Air Control Board (TACB) and United States Environmental Protection Agency (EPA)

**111.111(a)(1)(F) does not specify monitoring frequency**

**PM is required!**

# Compliance Assurance Monitoring

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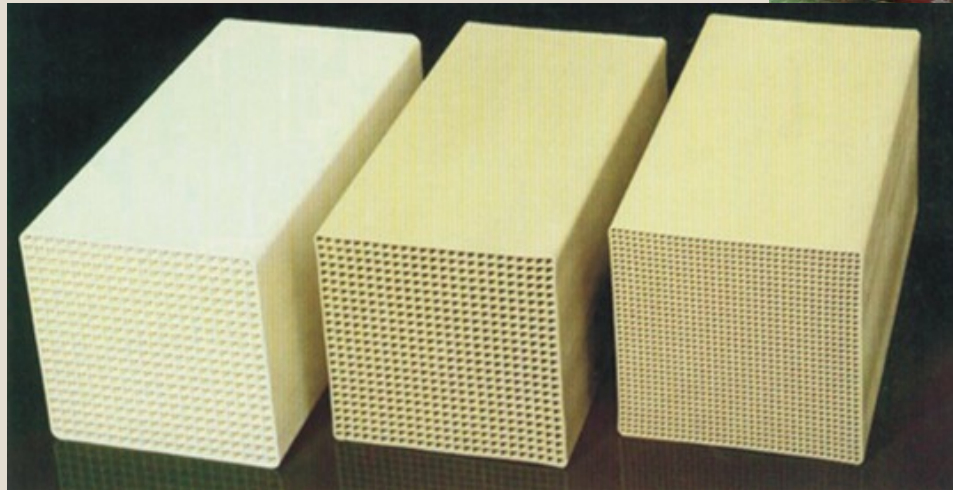
- Does the unit have an emission limitation?
- Does the unit have a control device?
- Is the unit a major source PRE control?
- If 'YES' to ALL of the above, then CAM is required\*\*

\*\* Certain exemptions to CAM requirements exist

# Example:

## Compliance Assurance Monitoring

- Turbine = 0.032 lb NO<sub>x</sub>/MMBtu
- Pre-control = 150 tpy NO<sub>x</sub>
- Control device = SCR
- **CAM is required**



# Example: Monitoring Options

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- APDG 5824: Compliance Assurance Monitoring
- NO<sub>x</sub> CEMS: CAM-NO-002
  - NO<sub>x</sub> lb/MMBtu
- SCR: CAM-SC-003 and CAM-SC-004
  - Inlet gas temperature and injection nozzle flow rate

# Attachments

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- Applicable Requirements
- Additional Monitoring
- **Permit Shield**
- NSR Authorizations
- Appendix B

# Permit Shields

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

# Example:

## OP-REQ2 Form

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- §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.



# Attachments

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- Applicable Requirements
- Additional Monitoring
- Permit Shield
- **NSR Authorizations**
- Appendix B

# NSR Authorization References

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- Major NSR Authorizations
- Minor NSR Authorizations
- Permits by Rule
- NSR authorizations must be effective for Title V issuance.

# NSR Authorization References by Emission Unit

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

# Attachments

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- Applicable Requirements
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- NSR Authorizations
- **Appendix B**

# Appendix B: Major NSR Summary Table

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- Incorporated by Reference (IBR)
- TCEQ formats table based on NSR MAERT
- Applicant identifies MRRT requirements from NSR special terms and conditions
- TCEQ reviews requirements and appends to SOP

# Appendix B:

## 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 STCs**

# Working Draft Permit

## 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 Notice

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## 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 Revisions
- TCEQ posts online
- 30-day public comment period
- 45-day EPA review starts with public comment period

# EPA Review

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- Concurrent with public notice or public announcement
- Stops if comments are received
- Begins again after comments are addressed



# Final State Action

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- TCEQ issues permit
- 60-day public petition period
  - EPA may receive valid petition
  - TCEQ resolves granted objections
- Permit, permit record, or both may be modified

# Final State Action

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A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Texas Company Cogeneration L.P.

AUTHORIZING THE OPERATION OF  
Texas Company Cogeneration Facility  
Unit ABC Cogeneration Facility  
Fossil Fuel Electric Power Generation

LOCATED AT  
Biggest County, Texas  
Latitude 28° 12' 36" Longitude 95° 3' 20"  
Regulated Entity Number: RN111222333

**Company,  
Site, Area,  
Location**

**Permit Number,  
Effective Date**

Permit No: 09999

Issuance Date: March 25, 2019

# Title V Permit Overview

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# Accessing Air Permit Documents

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## Central File Room

- TCEQ campus: Hard copies, films, etc.

## Central Registry

- **Online** – Title V or NSR by RN, permit #, name

## CFR Online

- **Online** – Detailed documents, project files, final actions

# [www.tceq.Texas.gov](http://www.tceq.Texas.gov)

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## Rules, Data, Forms and

**Rules and Rulemaking (p  
agreements)**

**Data and Records**

**Forms**

**Maps and Searches Using**

**Central File  
Room Online**

**Central  
Registry**

## Search Central Registry

**Search by Facility/Site (regulated e**

**Search by Name/Company (custom**

**Search by Permit/Registration (pro**

# TCEQ Records Online

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[www.tceq.texas.gov/agency/data/records-services/welcome-to-tceq-records-online](http://www.tceq.texas.gov/agency/data/records-services/welcome-to-tceq-records-online)

This application will allow you to search and view metadata for all publicly available electronic records in the TCEQ Central File Room, and in some instances a searchable PDF of the actual record, on many of the facilities regulated by the agency.

Please read our guidance document for more information. 

**Detailed  
Guidance**

# Site Operating Permits (SOPs)

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**General**

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