# Form OP-UA6 - Instructions Boiler/Steam Generator/Steam Generating Unit Attributes Texas Commission on Environmental Quality

#### **General:**

This form is used to provide a description and data pertaining to all combustion equipment used to produce steam including, but not limited to, boilers, steam generators, and steam generating units with potentially applicable requirements associated with a particular regulated entity number and application. Some data items must be completed for all boilers, steam generators, and steam generating units. Other items are only required to be completed for boilers, steam generators, and steam generating units meeting the specific criteria shown in the instructions below.

For each steam generating unit which is potentially applicable to a subpart of the D-Series, the applicant need only complete the table to which they are potentially subject. The other D-series tables need not be submitted; however, notes are included in the instructions which may give direction to other tables applicable to the unit if certain codes or instructions are given. The notes can be used as a road map to follow in deciding which tables must be filled out and which ones should be omitted.

Each table number, along with the possibility of a corresponding letter (i.e., Table 1a, Table 1b), corresponds to a certain state or federal rule. If the rule on the table is not potentially applicable to a combustion unit, then it should be left blank and need not be submitted with the application. The following boilers, steam generators, and steam generating units are considered off-permit sources and do not need to be listed:

- A. In counties affected by Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), boilers and water heaters that do not fire liquid or solid fuel and have a maximum rated capacity less than 1.0 MMBtu/hr, unless the unit is placed in service after June 9, 1993, as a functionally identical replacement for existing units subject to the provisions 30 TAC Chapter 117, Subchapter B.
- B. In counties not affected by 30 TAC Chapter 117, boilers, and water heaters with a heat input capacity less than 10 MMBtu/hr and do not fire liquid or solid fuel.

If the codes entered by the applicant show negative applicability to the rule or sections of the rule represented on the table, then the applicant need not complete the remainder of the table(s) that correspond to the rule. Further instruction as to which questions should be answered and which questions should not be answered are located in the "Specific" section of the instruction text. The following is included in this form:

<u>Tables 1a - 1b</u> :	Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators
<u>Tables 2a - 2c</u> :	Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Da: Standards of Performance for Electric Utility Steam Generating Units
<u>Tables 3a - 3e</u> :	Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
<u>Tables 4a - 4b</u> :	Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
<u>Tables 5a - 5c</u> :	Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B: Combustion Control at Major Industrial. Commercial, and Institutional Sources in Ozone Nonattainment Areas

**Tables 6a - 6b:** Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter C:

Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment

Areas

Table 7: Title 30 Texas Administrative Code Chapter 112 (30 TAC Chapter 112), Subchapters A–D:

**Control of Air Pollution from Sulfur Compounds** 

**Tables 8a - 8c:** Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113), Subchapter D:

**Hospital/Medical Infectious Waste Incinerators** 

Tables 9a - 9b: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter E:

**Division 1: Utility Electric Generation in East and Central Texas** 

**Tables 10a - 10b:** Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart EEE: Hazardous

**Waste Combustors** 

**Table 11**: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111), Subchapter A:

**Division 2: Incineration** 

**Table 12**: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111), Subchapter A:

**Division 5: Emission Limits on Nonagricultural Sources** 

**Tables 13a - 13i:** Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU:

Coal- and Oil-Fired Electric Utility Steam Generating Units

**Tables 14a - 14g:** Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD:

**Industrial, Commercial, and Institutional Boilers** 

<u>Tables 15a – 15b</u> Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart TTTT: Standards

of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units

Note: Form OP-UA15 (Emission Point/Stationary Vent, Distillation Vent/VOC Process Vent Attributes) Emission Points, Table 1: Title 30 TAC Chapter 111 must also be completed for all combustion units operated to generate steam.

The Texas Commission on Environmental Quality (TCEQ) Regulated Entity Number (RNXXXXXXXX) and the application area name from Form OP-1 (Site Information Summary) must appear in the header of each page for the purpose of identification for the initial submittal. The date of the initial form submittal must also be included and should be consistent throughout the application (MM/DD/YYYY). **Leave the permit number blank for the initial form submittal.** If this form is included as part of the permit revision process, enter the permit number assigned by the TCEQ, the area name (from Form OP-1), the date of the revision submittal, and the regulated entity number.

Unit attribute questions that do not require a response from all applicants are preceded by qualification criteria in the instructions. If the unit does not meet the qualification criteria, a response to the question is not required. Anytime a response is not required based on the qualification criteria, leave the space on the form blank.

Notwithstanding any qualification criteria in the form instructions or information provided in other TCEQ guidance, the applicant may leave an attribute question blank (or indicate "N/A" for "Not Applicable") if the attribute is not needed for the applicable requirement determinations of a regulation for a unit.

In some situations, the applicant has the option of selecting alternate requirements, limitations, and/or practices for a unit. Note that these alternate requirements, limitations, and/or practices must have the required approval from the TCEQ Executive Director and/or the U.S. Environmental Protection Agency (EPA) Administrator before the federal operating permit application is submitted.

The Texas Commission on Environmental Quality (TCEQ) requires that a Core Data Form be submitted on all incoming registrations unless all of the following are met: The Regulated Entity and Customer Reference Numbers have been issued by the TCEQ and no core data information has changed. The Central Registry, a common record area of the TCEQ, maintains information about TCEQ customers and regulated activities, such as company names, addresses, and telephone numbers. This information is commonly referred to as "core data." The Central Registry provides the regulated community with a central access point within the agency to check core data and make changes when necessary. When core data about a facility is moved to the Central Registry, two new identification numbers are assigned: The Customer Reference (CN) number and the Regulated Entity (RN) number. The Core Data Form is required if facility records are not yet part of the Central Registry or if core data for a facility has changed. If this is the initial registration, permit, or license for a facility site, then the Core Data Form must be completed and submitted with application or registration forms. If amending, modifying, or otherwise updating an existing record for a facility site, the Core Data Form is not required, unless any core data information has changed. To review additional information regarding the Central Registry, go to the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/central\_registry/index.html">www.tceq.texas.gov/permitting/central\_registry/index.html</a>.

## **Specific:**

<u>Table 1a:</u> Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators

**★** Complete for site operating permit (SOP) applications only.

Note: Per TCEQ Rule Interpretation Number 60D.004, steam generating units greater than 73 MW (250 MMBtu/hr) and constructed after June 19, 1986, are not subject to 40 CFR Part 60, Subpart D. Therefore, Tables 1a - 1b should not be completed for these units. However, these units are potentially subject to 40 CFR Part 60, Subpart Db. Tables 3a - 3d should be completed as necessary.

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

#### **Construction/Modification Date:**

Select one of the following options that describe the date of commencement of the most recent construction, modification, or reconstruction. Enter the code on the form.

Code	Description
71-	On or before August 17, 1971
71-76	After August 17, 1971, and on or before December 22, 1976
76-78	After December 22, 1976, and on or before September 18, 1978
78+	After September 18, 1978

**▼** Continue only if "Construction/Modification Date" is "71-76," "76-78," or "78+."

## **Covered Under Subpart Da or KKKK:**

Enter "YES" if the steam generating unit is covered under 40 CFR Part 60, Subpart Da or 40 CFR Part 60, Subpart KKKK. Otherwise, enter "NO."

▼ Continue only if "Covered Under Subpart Da or KKKK" is "NO." If "Covered under Subpart Da or KKKK" is "YES," complete Table 2a of this unit attribute form or Table 6a of Form OP-UA11, as applicable.

## **Changes to Existing Affected Facility:**

Enter "YES" if a change has been made to the existing fossil fuel-fired steam generating unit, which was not previously subject to Subpart D, to accommodate the use of combustible materials other than fossil fuels. Otherwise, enter "NO."

## **▼** Continue only if "Changes to Existing Affected Facility" is "NO."

#### **Heat Input Rate:**

Select one of the following options for the heat input rate. Enter the code on the form.

Code	Description
250-	Heat Input Rate is less than or equal to 250 MMBtu/hr (73 MW)
250+	Heat Input Rate is greater than 250 MMBtu/hr (73 MW)

- ★ Complete Table 3a if "Construction/Modification Date" is "78+" and "Heat Input Rate" is "250-."
- **▼** Continue only if "Heat Input Rate" is "250+."

#### **Alternate 42C:**

Enter "YES" if the facility is meeting § 60.42Da(a) [per § 60.42(c)] as an alternate to meeting the requirements of § 60.42(a) for PM. Otherwise, enter "NO."

#### PM CEMS:

Enter "YES" if the facility uses a CEMS to measure PM. Otherwise, enter "NO."

## **★** Complete "Opacity Monitoring" only if "PM CEMS" is "NO."

## **Opacity Monitoring:**

Select one of the following options for complying with the opacity monitoring requirement. Enter the code on the form.

Code	Description
COMS	Continuous opacity monitoring system for measuring the opacity of emissions
BLDS	Bag leak detection system to monitor performance of a fabric filter (baghouse) according to requirements in § 60.48Da
ESPMOD	Electrostatic precipitator (ESP) predictive model to monitor performance of an ESP according to requirements in § 60.48Da
PMCPMS	Continuous parametric monitoring system for PM operated according to requirements in 40 CFR Part 63, Subpart UUUUU
OTHER	Facility meets exemption from COMS in § 60.45(b)(1) or (b)(6)
NONE	Opacity limit is not applicable

#### Gas/Liquid Fuel:

Enter "YES" if the facility burns only gaseous or liquid fossil fuel (excluding residual oil) with potential SO<sub>2</sub> emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO<sub>2</sub> or PM. Otherwise, enter "NO."

### **Fuels with 0.30 Percent or Less Sulfur:**

Enter "YES" if the facility does not use post combustion technology (except a wet scrubber) for reducing PM, SO<sub>2</sub>, or CO emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis. Otherwise, enter "NO."

#### **Specific Site:**

Enter "YES" if the facility is Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX. Otherwise, enter "NO." (Please note this question refers only to Unit #1 at Harrington Station. For additional steam generating facilities at Harrington Station, enter "NO.")

<u>Table 1b</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators

## **★** Complete for SOP applications only.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

## **D-Series Fuel Type:**

Select one or more of the following options for fuel type(s) used to fire the boiler, steam generator, or steam generating unit. Enter the code(s) on the form. In some cases, several fuel type code options could appropriately describe a single fuel being combusted (e.g., distillate oil). In these instances, select one fuel type code which best represents the fuel being combusted. Enter the code on the form.

Code	Description
WD	Wood-residue
LG	Lignite
CR25	Fossil fuel containing at least 25%, by weight, of coal refuse
LG25	Fossil fuel containing at least 25% of lignite mined in North Dakota, South Dakota, or Montana
GFF	Gaseous fossil fuel other than natural gas
SFF	Solid fossil fuel (fuel that is not lignite, at least 25% coal refuse, or at least 25% lignite mined in
	North Dakota, South Dakota, or Montana)
LFF	Liquid fossil fuel
NFF	Non-fossil fuel other than wood residue
NG	Natural gas

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the D-Series fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (see "Fuel-firing Option A" for an example of multiple gaseous fossil fuels combusted simultaneously).

Example:	SOP Index No.	<b>D-Series Fuel Type</b>	<b>D-Series Fuel Type</b>	<b>D-Series Fuel Type</b>
Fuel-firing Option A:	60D-1A	GFF	GFF	GFF
	60D-1B	GFF		
Fuel-firing Option B	60D-2	WD	LG25	
Fuel-firing Option C	60D-3	LG	SFF	NFF

## **▼** Continue only if "D-Series Fuel Type" is not "WD," "NFF," or "WD," and "NFF" in combination.

#### Alternate 43D:

Select one of the following options for alternate SO<sub>2</sub> requirements. Enter the code on the form.

Code	Description
43DAI3	Facility is meeting § 60.43Da(i)(3) [per § 60.43(d)] as an alternate to meeting the requirements of
	§ 60.43(a) and (b) for SO <sub>2</sub>
42BK4	Facility is meeting § 60.42b(k)(4) [per § 60.43(d)] as an alternate to meeting the requirements of
	§ 60.43(a) and (b) for SO <sub>2</sub>
NONE	No alternative requirement is used) for SO <sub>2</sub>

#### Alternate 44E:

Enter "YES" if the facility is meeting § 60.44Da(e)(3) [per § 60.44(e)] as an alternate to meeting the requirements of § 60.44(a), (b), and (d) for NO<sub>x</sub>. Otherwise, enter "NO."

## Flue Gas Desulfurization:

Enter "YES" if the unit utilizes a flue gas desulfurization device. Otherwise, enter "NO."

## SO<sub>2</sub> Monitoring:

Select one of the following options for monitoring of sulfur dioxide (SO<sub>2</sub>) emissions. Enter the code on the form.

Code	Description
CEMS	Continuous emissions monitoring system
FLSAMP	Fuel sampling and analysis
FLREC	Fuel receipts
NONE	No monitoring is required for SO <sub>2</sub> emissions because there is no applicable SO <sub>2</sub> emission limit

## **Cyclone-Fired Unit:**

Enter "YES" if the unit is a cyclone-fired unit. Otherwise, enter "NO."

## **NO**<sub>x</sub> Monitoring Type:

Enter "YES" if it was demonstrated during the performance test that emissions of  $NO_x$  are less than 70% of applicable standards in 40 CFR § 60.44. Otherwise, enter "NO."

## <u>Table 2a</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Da: Standards of Performance for Electric Utility Steam Generating Units

#### **★** Complete this table for electric utility steam generating units and SOP applications only.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

#### **Construction/Modification Date:**

Select one of the following options that describe the date of commencement of the most recent construction, modification, or reconstruction. Enter the code on the form.

Description
On or before September 18, 1978
After September 18, 1978, and on or before July 9, 1997
Constructed after July 9, 1997, and on or before February 28, 2005
Reconstructed after July 9, 1997, and on or before February 28, 2005
Constructed after February 28, 2005
Reconstructed after February 28, 2005, and on or before May 3, 2011
Modified after February 28, 2005, and on or before May 3, 2011
Constructed on or after May 4, 2011
Reconstructed on or after May 4, 2011
Modified on or after May 4, 2011

## **▼** Continue only if "Construction/Modification Date" is not "78-."

### **Heat Input of Fossil Fuel:**

Select one of the following options for the heat input of fossil fuel alone or in combination with any other fuel. Enter the code on the form.

Code	Description
250-	Heat input of fossil fuel is less than or equal to 250 MMBtu/hr (73 MW)
250+	Heat input of fossil fuel is greater than 250 MMBtu/hr (73 MW)

## **★** Complete Table 3a if "Heat Input of Fossil Fuel" is "250-." Do not complete the remainder of Table 2.

## **D-Series Fuel Type:**

Select one or more of the following options for fuel type(s) used to fire the boiler, steam generator, or steam generating unit. Enter the code(s) on the form. In some cases, several fuel type code options could appropriately describe a single fuel being combusted (e.g., distillate oil). In these instances, select one fuel type code which best represents the fuel being combusted. Enter the code on the form.

Code	Description			
NG	Natural gas			
ACL	Anthracite coal			
SRC	Solvent refined coal (SRC-I)			
LCL	Liquefied coal			
SFF	Solid fossil fuel			
LFF	Liquid fossil fuel			
GFF	Gaseous fossil fuel			
SNFF	Solid non-fossil fuel			
LNFF	Liquid non-fossil fuel			
GNFF	Gaseous non-fossil fuel			
SSDFF	Other solid fossil fuel derived from another solid fossil fuel			
LSDFF	Other liquid fossil fuel derived from another solid fossil fuel			
GSDFF	Other gaseous fossil fuel derived from another solid fossil fuel			
SSDNFF	Solid fuel derived from a solid non-fossil fuel			
LSDNFF	Liquid fuel derived from a solid non-fossil fuel			
GSDNFF	Gaseous fuel derived from a solid non-fossil fuel			

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the D-Series fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (See Fuel-firing Option A: for an example of multiple gaseous fossil fuels derived from a solid non-fossil fuel combusted simultaneously).

Example:	SOP Index No.	<b>D-Series Fuel Type</b>	<b>D-Series Fuel Type</b>	<b>D-Series Fuel Type</b>
Fuel-firing Option A:	60DA-1A	GSDNFF	GSDNFF	GSDNFF
	60DA-1B	GSDNFF		
Fuel-firing Option B	60DA-2	NG	ACL	
Fuel-firing Option C	60DA-3	LCL	SSDFF	LSDFF

## **Changes to Existing Affected Facility:**

Select one of the following changes to an existing affected facility. Enter the code on the form.

Code	Description
COFF	A change has been made to the existing fossil fuel-fired steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Da, to accommodate the use of combustible
	materials other than fossil fuels
CFNF	A change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Da and was originally designed to fire gaseous or liquid fossil fuels,
	to accommodate the use of any other fuel (fossil or non-fossil)
NO	No change as described in COFF and CFNF

- **▼** Continue only if "Changes to Existing Affected Facility" is "NO."
- ★ Complete "Percent (%) Coal Refuse" only if "Construction/Modification Date" is "05-11C," 05-11R," 05-11M," "11+C," "11+R," or "11+M."

### **Percent (%) Coal Refuse:**

Enter "YES" if the facility burns 75% or more coal refuse on a 12-month rolling average basis. Otherwise, enter "NO."

#### **Combined Cycle Type:**

Select one of the following combined cycle type options. Enter the code on the form.

Code	Description
IGCC	Integrated gasification combined cycle gas turbine electric utility steam generating unit
COMCYC	Combined cycle gas turbine (other than an IGCC) that is not subject to NSPS KKKK
KKKK	Combined cycle gas turbine (other than an IGCC) that is subject to NSPS KKKK
EB/CCCC	Municipal/commercial/industrial solid waste unit that is subject to NSPS Eb or CCCC
OTHER	Not a combined cycle gas turbine or a unit subject to NSPS Eb or CCCC

- **▼** Do not continue if "Combined Cycle Type" is "EB/CCCC" or "KKKK."
- **▼** Do not continue if "Combined Cycle Type" is "IGCC" and "Construction/Modification Date" is "78-97," "97-05C," or "97-05R."

#### **PM Commercial Demonstration Permit:**

Select one of the following exemptions to the particulate matter emission limits. Enter the code on the form.

**Code Description** 

CDP The facility is operating under a PM commercial demonstration permit issued by the

Administrator according to the provisions of § 60.47Da

EXEMPTF1 Affected facility meets the exemption in 60.42Da(f)(1)

NONE The facility does not meet the PM exemptions in  $\S 60.42Da(f)(1)$  or (2)

## ★ Complete "PM Standard Basis" only if "PM Commercial Demonstration Permit" is "NONE" and "Construction/Modification Date" is "05-11C," "05-11R," "05-11M," "11+M," "11+C,' or "11+R."

#### **PM Standard Basis:**

Select one of the following PM standards. Enter the code on the form.

For facilities with "Construction/Modification Date" of "05-11C," "05-11R," "05-11M," or "11+M"

Code Description

ALT-D § 60.42Da(d) alternative to § 60.42Da(c)(1) or (2)

PMGEO Gross energy based output standard

PMHIN Heat input-based standard

For facilities with "Construction/Modification Date" of "11+C" or "11+R"

**Code Description** 

PMGEO Gross energy based output standard PMNEO Net energy based output standard

## <u>Table 2b</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Da: Standards of Performance for Electric Utility Steam Generating Units

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titley/ty\_fop\_guidance.html.

## **★** Complete "NO<sub>x</sub> Standard" only if "Combined Cycle Type" is "IGCC."

#### NO<sub>x</sub> IGCC Standard:

Select one of the following options for NO<sub>x</sub> Standard applicable to the IGCC. Enter the code on the form.

Code	Description
LIQ+50	The facility burns liquid fuel exclusively or in combination with solid-derived fuel such that
	liquid fuel contributes 50% or more of the total heat input
LIQVAR	The facility, during a 30-day rolling average compliance period, burns liquid fuel in combination
	with solid-derived fuel such the liquid fuel contributes 50% or more of the total heat input for
	only a portion of the clock hours in the 30-day period
LIQ-50	Neither of the above (liquid fuel is less than 50% of the total heat input)

## **★** Complete "MACT Applicability" only if "Construction/Modification Date" is "11+C," "11+R," or "11+M."

## **MACT Applicability:**

Select one of the following for options compliance with MACT work practice standards. Enter the code on the form.

Code	Description
63UUUUU	Unit is also subject to 40 CFR Part 63, Subpart UUUUU and complies with those work practice standards during startup/shutdown
63DDDDD	Unit is also subject to 40 CFR Part 63, Subpart DDDDD and complies with those work practice standards during startup/shutdown
NONE	Unit is not subject to 40 CFR Part 63, Subpart DDDDD or UUUUU

## **Unit Type:**

Select one of the following unit type options. Enter the code on the form.

Code	Description
RESREC	Resource recovery unit
OTHER	Other unit type

## **Monitoring Type:**

Designate the monitoring option for each pollutant. Select only the type(s) of monitoring applicable under 40 CFR Part 60, Subpart Da. If no monitoring is required for a specified pollutant, leave the column blank.

## **PM Monitoring Type:**

Select one of the following monitoring options for particulate matter. Enter the code on the form.

Note: PM Monitoring type need not be completed if "PM Exemptions" is "CDP," or "EXEMPTF1."

Code	Description
<b>PMCEMS</b>	Continuous emission monitoring system (CEMS) per § 60.49Da(v)
<b>EP-PMOD</b>	An electrostatic precipitator is used for PM control and PM monitored using a predictive model
	per § 60.48Da(o)(3)
BH-LDET	A baghouse is used for PM control and PM monitored using a leak detection per § 60.48Da(o)(4)
EPBH-COMS	An electrostatic precipitator or a baghouse is used for PM control and PM monitored using
	COMS per § 60.48Da(o)(2)
PMCPMS	Continuous parameter monitoring system (CPMS) per 40 CFR Part 63, Subpart UUUUU per
	60.49Da(a)(4)(ii)
OTHERPM	Other than above options

## **Opacity Monitoring Type:**

Select one of the following monitoring options for opacity. Enter the code on the form.

Note: "Opacity Monitoring Type" need not be completed if "PM Exemptions" is "CDP," or "EXEMPTF1."

Code	Description
CMS	Continuous monitoring system for opacity (COMS)
ALT-A2I	The facility uses a fabric filter with a leak detection system installed per § 60.49Da(a)(2)(i) to meet § 60.42Da and elects to monitor opacity per § 60.49Da(a)(3)
ALT-A2II	The facility does not use a post-combustion technology for SO <sub>2</sub> or PM and burns gaseous or liquid fuels meeting specifications in § 60.49Da(a)(2)(ii) and elects to monitor opacity per § 60.49Da(a)(3)
ALT-A2III	The facility does not use a post-combustion technology (except a wet scrubber) for PM, SO <sub>2</sub> or CO and burns gaseous fuels or fuel oils meeting specifications in § 60.49Da(a)(2)(iii)(A)-(C) and elects to monitor opacity per § 60.49Da(a)(3)
ALT-A2IV	The facility uses an ESP and uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the most current requirements in section §60.48Da of this part) (use if PM monitoring is EP-PMOD)
ALT-A4I	The affected facility combusts only gaseous and/or liquid fuels (excluding residue oil) where the potential SO2 emissions rate of each fuel is no greater than 26 ng/J (0.060 lb/MMBtu), and the unit operates according to a written site-specific monitoring plan approved by the permitting authority
ALT-A4II	The affected facility uses a particulate matter continuous parametric monitoring system (PM CPMS) according to the requirements specified in subpart UUUUU of part 63
NONE	No monitoring for opacity (use if PM monitoring is "PMCEMS")

## **SO<sub>2</sub> Monitoring Type:**

Select one of the following monitoring options for sulfur dioxide (SO<sub>2</sub>). Enter the code on the form.

Code	Description
ASFRD-C	As-fired sampling and using continuous emission monitoring system [§ 60.49Da(b)(3)]
ASFRD-C75	As-fired sampling and using continuous emission monitoring system installed to meet the
	requirements of Part 75 [§ 60.49Da(b)(3)]
CEM	Continuous emission monitoring system [§ 60.49Da(b)(1) or (b)(2)]
CEMS75	Continuous emission monitoring system installed to meet the requirements of
	Part 75 [§ 60.49Da(b)(4)]
NONE	Only gaseous and/or liquid fuels (excluding residual oil) where the potential SO2 emissions rate
	of each fuel is 26 ng/J (0.060 lb/MMBtu) or less are combusted as specified in 60.49Da(b)

## **NO**<sub>x</sub> Monitoring Type:

Select one of the following monitoring options for nitrogen oxides (NO<sub>x</sub>). Enter the code on the form.

Code	Description
CEMS	Continuous emission monitoring system
CEMS75	Continuous emission monitoring system installed to meet the requirements of Part 75
PERF	Performance test method per $\S 60.48Da(j)(1)$ or $(k)(1)$

### **SO2** Commercial Demonstration Permit:

Enter "YES" if the facility is operating under an SO2 commercial demonstration permit issued by the Administrator according to the provisions of § 60.47Da. Otherwise, enter "NO."

**★** Do not complete "SO<sub>2</sub> Emission Rate" if "D-Series Fuel Type" is only "ACL" or "SRC;" or if "Construction/Modification Date" is "05-11C," 05-11R," 05-11M," "11+C," "11+R," or "11+M."

#### **SO<sub>2</sub> Emission Rate:**

Select one of the following options for the SO<sub>2</sub> emission rate. Enter the code on the form for each fuel firing option. Do not select a heat input option if complying with lb/MWh limit in 60.43Da(a)(3) that is in lb/MWh heat output. Select the energy input option if complying with lb/MWh limit in 60.43Da(a) that is in lb/MWh heat input.

Code	Description
65-	SO <sub>2</sub> emission rate is less than 0.15 lb/MMBtu (65 ng/J) heat input
65-86	SO <sub>2</sub> emission rate is greater than 0.15 lb/MMBtu, but less than 0.20 lb/MMBtu (86 ng/J) heat input
86-260	SO <sub>2</sub> emission rate is greater than or equal to 0.20 lb/MMBtu (86 ng/J) heat input but less than or equal to 0.60 lb/MMBtu (260 ng/J) heat input
260+	SO <sub>2</sub> emission rate is greater than 0.60 lb/MMBtu (260 ng/J) heat input
180-	SO <sub>2</sub> emission rate is less than 1.4 lb/MWh (180 ng/J) gross energy output

#### FGD:

Enter "YES" if the affected facility has a flue gas desulfurization system. Otherwise, enter "NO."

<u>Table 2c</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Da: Standards of Performance for Electric Utility Steam Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

**★** Complete "SO<sub>2</sub> Standard Basis" only if "Construction/Modification Date" is "05-11C," 05-11R," 05-11M," "11+C," "11+R," or "11+M."

#### **SO<sub>2</sub> Standard Basis:**

Select one of the following SO<sub>2</sub> standards. Enter the code on the form.

Code	Description
SO2GEO	The facility meets a standard that is gross energy output-based
SO2NEO	The facility meets a standard that is net energy output-based
SO2HIN	The facility meets a standard that is heat input-based
NEITHER	The facility meets a standard other than output- or input-based (i.e. percent reduction)

### **NOx Commercial Demonstration Permit:**

Enter "YES" if the facility is operating under a NOx commercial demonstration permit issued by the Administrator according to the provisions of § 60.47Da. Otherwise, enter "NO."

- **▼** Do not continue if "NOx Commercial Demonstration Permit" is "YES."
- **★** Complete "Alternative Standard for Combined NOx and CO" only if "Construction/Modification Date" is "11+C," "11+R," or "11+M."

#### Alternative Standards for Combined NOx and CO:

Select one of the following options for the alternative standards for combined NOx + CO. Enter the code on the form

Code	Description
NOXGEO	The facility is electing to meet the applicable standard for combined NOX and CO standard that
	is gross energy output-based
NOXNEO	The facility is electing to meet the applicable standard for combined NOX and CO standard that
	is net energy output-based
NONE	The facility is not electing to meet the applicable standard for combined NOX and CO

**★** Complete "NO<sub>x</sub> Standard Basis" only if "Construction/Modification Date" is "05-11R," 05-11M," "11+C," or "11+R" and "Combined Cycle Type" is not "IGCC."

#### **NO<sub>x</sub> Standard Basis:**

Select one of the following NOx standards. Enter the code on the form.

For facilities constructed, reconstructed, or modified on or after May 4, 2011

Code Descri	ption
NOXGEO	The facility meets a standard that is gross energy output-based
NOXNEO	The facility meets a standard that is net energy output-based

For facilities reconstructed after February 28, 2005, and on or before May 3, 2011

Code	Description
NOXGEO	The facility meets a standard that is gross energy output-based
NOXHIN	The facility meets a standard that is heat input-based

★ Complete "Duct Burner" only if "Construction/Modification Date" is "78-97" and if only one "D-Series Fuel Type" was entered; or if "Construction/Modification Date" is "97-05C;" or if "Construction/Modification Date" is "05-11C" and "Combined Cycle Type" is not "IGCC."

#### **Duct Burner:**

Enter "YES" if the unit is a duct burner. Otherwise, enter "NO."

**★** Complete "PM Flow Monitoring System" only if "PM Standard" is "PMGEO" or "PMNEO."

### **PM Flow Monitoring System:**

Select one of the following options to describe the flow monitoring system required for facility complying with an output-based standard under § 60.42Da. Enter the code on the form.

Code	Description
DA	Continuous flow monitoring system meeting the requirements of Performance Specification 6 of
	40 CFR Part 60 Subpart Da: Appendix B and Procedure 1 of Appendix F [in accordance with
	40 CFR § 60.49Da(1)]
CFMS75	Continuous flow monitoring system certified according to the requirements of 40 CFR § 75.20,
	meeting the applicable quality control and quality assurance requirements of 40 CFR § 75.21, and
	validated according to 40 CFR § 75.23 [in accordance with 40 CFR § 60.49Da(m)]
75D	Fuel flow monitoring system certified and operated according to the requirements of 40 CFR
	Part 75, Appendix D (gas-fired or oil-fired units only) [in accordance with 40 CFR § 60.49Da(n)]

**★** Complete "SO<sub>2</sub> Flow Monitoring" only if "SO<sub>2</sub> Standard Basis" is "SO<sub>2</sub>GEO" or "SO<sub>2</sub>NEO."

## **SO<sub>2</sub> Flow Monitoring System:**

Select one of the following options to describe the flow monitoring system required for facility complying with an output-based standard under § 60.43Da. Enter the code on the form.

Code	Description
DA	Continuous flow monitoring system meeting the requirements of Performance Specification 6 of
	40 CFR Part 60 Subpart Da: Appendix B and Procedure 1 of Appendix F [in accordance with
	40 CFR § 60.49Da(l)]
CFMS75	Continuous flow monitoring system certified according to the requirements of 40 CFR § 75.20,
	meeting the applicable quality control and quality assurance requirements of 40 CFR § 75.21, and
	validated according to 40 CFR § 75.23 [in accordance with 40 CFR § 60.49Da(m)]
75D	Fuel flow monitoring system certified and operated according to the requirements of 40 CFR
	Part 75, Appendix D (gas-fired or oil-fired units only) [in accordance with 40 CFR § 60.49Da(n)]

★ Complete "NO<sub>x</sub> Flow Monitoring" only if "Construction/Modification Date" is "97-05C," "97-05R," or "05+11C;" or if "Combined Cycle Type" is "IGCC;" or if "NO<sub>x</sub> Standard Basis" is "NOXGEO" or "NOXNEO."

#### **NO**<sub>x</sub> Flow Monitoring System:

Select one of the following options to describe the flow monitoring system required for facility complying with an output-based standard under § 60.44Da. Enter the code on the form.

Code	Description
DA	Continuous flow monitoring system meeting the requirements of Performance Specification 6 of
	40 CFR Part 60 Subpart Da, Appendix B and Procedure 1 of Appendix F [in accordance with
	40 CFR § 60.49Da(l)]
CFMS75	Continuous flow monitoring system certified according to the requirements of 40 CFR § 75.20,
	meeting the applicable quality control and quality assurance requirements of 40 CFR § 75.21, and
	validated according to 40 CFR § 75.23 [in accordance with 40 CFR § 60.49Da(m)]
75D	Fuel flow monitoring system certified and operated according to the requirements of 40 CFR
	Part 75, Appendix D (gas-fired or oil-fired units only) [in accordance with 40 CFR § 60.49Da(n)]

<u>Table 3a</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating

**★** For units in GOP applications that were constructed, modified, or reconstructed after June 9, 1989, do not complete Table 3. Complete Table 4 as directed.

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

#### **Construction/Modification Date:**

Select one of the following options that describe the date of commencement of the most recent construction, modification, or reconstruction. Enter the code on the form.

For units in GOP applications:

**Code Description** 

G89- On or before June 9, 1989

For units in SOP applications:

Code	Description
84-	On or before June 19, 1984
84-86	After June 19, 1984, and on or before June 19, 1986
86-86	After June 19, 1986, and before November 25, 1986
86-97	On or after November 25, 1986, and on or before July 9, 1997
97-05CR	Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005
97-05M	Modified after July 9, 1997, and on or before February 28, 2005
05+CR	Constructed or reconstructed after February 28, 2005
05+M	Modified after February 28, 2005

▼ Continue only if "Construction/Modification Date" is "84-86," "86-86," "86-97," "97-05CR," "97-05M," "05+CR," "05+M," or "G89-."

## **Heat Input Capacity:**

Select one of the following options for the heat input capacity or the maximum design heat input capacity. Enter the code on the form.

For units in GOP applications:

Code	Description
NA	Not applicable
For units in	SOP applications:

Code	Description
100-	Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW)
100-250	Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to
	250 MMBtu/hr (73 MW)
250+	Heat input capacity is greater than 250 MMBtu/hr (73 MW)

- **▼** Continue only if "Heat Input Capacity" is "100-250," or "250+."
- ★ If "Heat Input Capacity" is "100-," complete Table 4 as directed. If application type is GOP, go to Table 3b and complete "D-Series Fuel Type." Do not complete the rest of Table 3.

#### Subpart Da:

Enter "YES" if the affected facility meets applicability requirements of 40 CFR Part 60, Subpart Da. Otherwise, enter "NO."

**▼** Continue only if "Subpart Da" is "NO."

### **Changes to Existing Affected Facility:**

Enter "YES" if a change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. Otherwise, enter "NO."

### **▼** Continue only if "Changes to Existing Affected Facility" is "NO."

#### **Subpart Ea, Eb or AAAA:**

Enter "YES" if the affected facility meets applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Otherwise, enter "NO."

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## **▼** Continue only if "Subpart Ea, Eb or AAAA" is "NO."

## **Subpart KKKK:**

Enter "YES" if the affected facility is a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Otherwise, enter "NO."

**▼** Continue only if "Subpart KKKK" is "NO."

### **Subpart Cb or BBBB:**

Enter "YES" if the affected facility is covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Otherwise, enter "NO."

**▼** Continue only if "Subpart Cb or BBBB" is "NO."

<u>Table 3b</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating

★ Complete only if "Heat Input Capacity" is "100-250," "250+," or "NA."

### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

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## **D-Series Fuel Type:**

Select one or more of the following options for fuel type(s) used to fire the boiler, steam generator, or steam generating unit. Enter the code(s) on the form. In some cases, several fuel type code options could appropriately describe a single fuel being combusted (e.g., distillate oil). In these instances, select one fuel type code which represents the fuel being combusted. Enter the code on the form.

Gas Series (Fossil)

Code	Description
NG	Natural gas (GOP applicants may only fire natural gas)
CDSFNG	Coal-derived synthetic fuel meeting the definition of natural gas

GFF Other gaseous fossil fuel

Oil Series (Fossil)

	,
Code	Description
PET	Petroleum, crude oil, or liquid fuel derived from crude oil or petroleum other than distillate or
	residual oil (and not a very low sulfur oil)
PETLSO3	Petroleum, crude oil, or liquid fuel derived from crude oil or petroleum other than distillate or
	residual oil and that contains no more than 0.3 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 140 ng/J (0.32 lb/MMBtu) heat input (VLS oil post 02/28/05 units)
PETLSO5	Petroleum, crude oil, or liquid fuel derived from crude oil or petroleum other than distillate or
	residual oil and that contains no more than 0.5 weight percent sulfur or has a SO <sub>2</sub> emission rate
	less than 215 ng/J (0.5 lb/MMBtu) heat input (VLS oil 02/28/05 or earlier units)
DOIL	Distillate oil (not a very low sulfur oil)
DOILLSO3	Distillate oil that contains no more than 0.3 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 140 ng/J (0.32 lb/MMBtu) heat input (VLS oil post 02/28/05 units)
DOILLSO5	
DOILLSOS	Distillate oil that contains no more than 0.5 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 215 ng/J (0.5 lb/MMBtu) heat input (VLS oil 02/28/05 or earlier units)
DOH	
ROIL	Residual oil with a nitrogen content less than or equal to 0.30% by weight (and not a very low sulfur oil)
ROILLSO3	Residual oil with a nitrogen content less than or equal to 0.30% by weight and that contains no
	more than 0.3 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 140 ng/J
	(0.32 lb/MMBtu) heat input (VLS oil post 02/28/05 units)
ROILLSO5	Residual oil with a nitrogen content less than or equal to 0.30% by weight and that contains no more than 0.5 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 215 ng/J (0.5 lb/MMBtu) heat input (VLS oil 02/28/05 or earlier units)
RO30+	Residual oil with a nitrogen content greater than 0.30% by weight (and not a very low sulfur oil)
RO30+LSO3	Residual oil with a nitrogen content greater than 0.30% by weight and that contains no more than
	0.3 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 140 ng/J (0.32 lb/MMBtu) heat input (VLS oil post 02/28/05 units)
RO30+LSO5	Residual oil with a nitrogen content greater than 0.30% by weight and that contains no more than
KOJU I LBOJ	0.5 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 215 ng/J (0.5 lb/MMBtu) heat input
	(VLS oil 02/28/05 or earlier units)

#### Coal Series

Code	Description
COAL	Coal
LG	Lignite mined in North Dakota, South Dakota, or Montana
OLG	Lignite mined in states other than North Dakota, South Dakota, or Montana
CLR	Coal refuses
CDSF	Coal-derived synthetic fuel not meeting the definition of natural gas
PULV	Pulverized coal
COG	Coke oven gas

#### Other Fuels

Code

Couc	Description
MSW	Municipal-type solid waste
WD	Wood
BPW	Byproduct/waste
HZW	Hazardous waste
SFF	Other solid fossil fuel
SNFF	Other solid non fossil fuel
NSNFF	Other non-solid non fossil fuel
LFF	Other liquid fossil fuel

Description

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the D-Series fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (See Fuel-firing Option A: for an example of multiple petroleum fuels fired simultaneously).

Example:	SOP Index No.	D-Series Fuel Type	D-Series Fuel Type	ACF Option		
				S0 <sub>2</sub>	PM	NO <sub>X</sub>
60DB-1A	COAL	PET	PET	F30-CO		
60DB-1B	NG					
60DB-2	WD				F30-WD	
60DB-3	NG	DOIL	ROIL			F10-NG

### **▼** Continue only for SOP Applications.

## **★** Complete "Subpart D" only if "Construction/Modification Date" is "84-86."

#### **Subpart D:**

Enter "YES" if the affected facility meets the applicability requirements of 40 CFR Part 60, Subpart D. Otherwise, enter "NO."

## **★** Do not complete "Subpart J" if "Subpart D" is "YES."

### Subpart J:

Enter "YES" if the affected facility meets applicability requirements of 40 CFR Part 60, Subpart J. Otherwise, enter "NO."

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## **★** Do not complete "Subpart E" if "Subpart D" or "Subpart J" is "YES."

## **Subpart E:**

Enter "YES" if the affected facility meets applicability requirements of 40 CFR Part 60, Subpart E. Otherwise, enter "NO."

## **ACF Option:**

Select one of the following annual capacity factor (ACF) options. Enter the code on the form in the space next to the "D-Series Fuel Type" code (FE = Federally Enforceable).

SO <sub>2</sub>	Code F30-C F10-OIL OTHR	<b>Description</b> Coal and oil ACF less than or equal to 30% (FE) Oil ACF less than or equal to 10% (FE) Other ACF or no ACF	Citation [60.42b(d)(1)] [60.42b(f)(1)]
PM	Code	Description	Citation
	10-OTH	Coal with other fuels and other fuels ACF is less than or equal to 10%	[60.43b(a)(1)(ii)]
	F10+OTH	Coal with other fuels and other fuels ACF is greater	-
	F30-CLO	than 10% (FE) Coal or coal and other solid fuels ACF less than	[60.43b(a)(2)]
	130-CLO	or equal to 30% (FE)	[60.43b(a)(3)(iii)]
	30+WD	Wood ACF greater than 30%	[60.43b(c)(1)]
	F30-WD	Wood ACF less than or equal to 30% (FE)	[60.43b(c)(2)(i)  and  (ii)]
	10-OMW	Municipal-type solid waste with other fuels and other fuels ACF is less than or equal to 10%	[60.43b(d)(1)(ii)]
	F30-MSW	Municipal-type solid waste ACF less than or	[00.430(4)(1)(11)]
		equal to 30% (FE)	[60.43b(d)(2)(i) and (iii)]
	F30-OMW	Municipal-type solid waste and other fuels	[(0 421/4)/2)/i) 1 (''')]
	OTHR	ACF less than or equal to 30% (FE) Other ACF or no ACF	[60.43b(d)(2)(i) and (iii)]
$NO_x$	Code	Description	Citation
NOx	F10-MIX	Coal or oil, or mixture of these fuels with	Citation
	110 1/1111	natural gas ACF less than or equal to 10% (FE)	[60.44b(c)]
	F10-NGSL	Natural gas with wood, municipal-type solid	
		waste, or other solid fuel (except coal) and natural gas ACF is less than or equal to 10% (FE)	[60.44b(d)]
	F10-MLT	Coal, oil, or natural gas with byproduct/waste	[00.440(a)]
		and coal, oil, and natural gas ACF is less than	
	FIGNE	or equal to 10% (FE)	[60.44b(e)]
	F10-NG	Natural gas, distillate oil, and residual oil with a nitrogen content less than or equal to 0.30%	
		combined ACF less than or equal to 0.30%	[60.44b(j)(2)  and  (3)]
	10+RO	Residual oil with a nitrogen content of .30 weight	[ 0/( / (-/)
		percent or less natural gas, distillate oil, or any	FCO 401 ( )]
	OTHR	mixture of these fuels with an ACF greater than 10% Other ACF or no ACF	[60.48b(g)]

## <u>Table 3c</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

★ Complete "60.42b(k)(2) Low Sulfur Exemption" only if "Construction/Modification Date" is "05+CR" or "05+M," and the affected facility fires low sulfur oil and/or gaseous fuel, or mixtures that include very low sulfur oil and/or gaseous fuel.

## 60.42b(k)(2) Low Sulfur Exemption:

Enter "YES" if 60.42b(k)(2) exemption applies. Otherwise, enter "NO."

**★** Complete "60.42b(k)(4) Alternative" only if "Construction/Modification Date" is "05+CR" or "05+M," and the affected facility fires coal, as defined in 40 CFR § 60.41b, alone or in combination with other fuels.

## 60.42b(k)(4) Alternative:

Enter "YES" if 60.42b(k)(4) is chosen as an alternative requirement to 60.42b(k)(1). Otherwise, enter "NO."

**★** Complete "Post-combustion Control" only if "D-series Fuel Type" is "COG" alone or in combination with other fuels.

#### **Post-Combustion Control:**

Enter "YES" if the affected facility uses a post-combustion technology, other than a wet scrubber, to reduce emissions of particulate matter or sulfur dioxide. Otherwise, enter "NO."

**★** Complete "60.43b(h)(2) Alternative" only if "Construction/Modification Date" is "05+M."

## 60.43b(h)(2) Alternative:

Enter "YES" if the facility is electing to use the alternative requirements of 60.43b(h)(2) for PM. Otherwise, enter "NO."

**★** Complete "Electrical or Mechanical Output" only if "Construction/Modification Date" is "97-05CR" or "05+CR."

### **Electrical or Mechanical Output:**

Enter "YES" if more than 10% of the annual output is electrical or mechanical. Otherwise, enter "NO."

**★** Complete "Output Based Limit" only if "Electrical or Mechanical Output" is "YES."

#### **Output Based Limit:**

Enter "YES" if the facility is electing to comply with the output-based limit in 60.44b(l)(3). Otherwise, enter "NO."

**★** Complete "Steam with Electricity" only if "Output Based Limit" is "YES."

## **Steam with Electricity:**

Enter "YES" if the facility generates process steam in combination with electricity. Otherwise, enter "NO."

**★** Complete "Electricity Only" only if "Steam with Electricity" is "NO."

Enter "YES" if the facility generates electricity only. Otherwise, enter "NO."

#### 60.49Da(n) Alternative:

Enter "YES" if the facility is gas- or oil-fired and is using the 60.49Da(n) alternative. Otherwise, enter "NO."

★ Complete "60.49Da(m) Alternative" only if "60.49Da(n) Alternative" is "NO."

## 60.49Da(m) Alternative:

Enter "YES" if the facility is using the 60.49Da(m) alternative. Otherwise, enter "NO."

<u>Table 3d</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

★ Complete "Residual Oil Sampling" only if "D-Series Fuel Type" is "ROIL," "ROILLSO3," "ROILLSO5," "RO30+," "RO30+LSO3" or "RO30+LSO5."

## **Residual Oil Sampling:**

Enter "YES" if the residual oil is sampled and analyzed for nitrogen content as specified in 40 CFR § 60.49b(e). Otherwise, enter "NO."

## **Monitoring Type:**

Designate the monitoring options for each pollutant. Select only the type(s) of monitoring applicable under 40 CFR Part 60, Subpart Db.

#### PM.

Select one of the following monitoring options for PM. Enter the code on the form.

Code	Description
CEM	Continuous emission monitoring system and the facility is not subject to a federally enforceable
	PM limit of 0.030 lb/MMBtu or less
CEM030	Continuous emission monitoring system and the facility is subject to a federally enforceable PM
	limit of 0.030 lb/MMBtu or less
NONE	No particulate monitoring
FLCRT	Fuel certification (maintaining receipts per § 60.49b(r)(1) – use for § 60.43b(h)(5)
	exemption only)
FLSMP	Fuel certification (based on fuel analysis per § 60.49b(r)(2) – use for § 60.43b(h)(5) exemption only)

## **Opacity:**

Code

Select one of the following monitoring options for opacity. Enter the code on the form.

Description

Coue	Description
CMS	Continuous opacity monitoring systems (COMS)
CCEM	Continuous emissions monitoring system for carbon monoxide (CO) installed and operated per
	40 CFR § 60.48b(j)(4)
NONE	No particulate monitoring

#### NO<sub>x</sub>:

Select one of the following monitoring options for nitrogen oxides (NO<sub>x</sub>). Enter the code on the form.

Code	Description
CEM	Continuous emission monitoring system
CEM75	Continuous emission monitoring system used to comply with 40 CFR Part 75
PEM	Predictive emission monitoring system
NONE	No NO <sub>x</sub> monitoring

#### SO<sub>2</sub>:

Select one of the following monitoring options for SO<sub>2</sub>. Enter the code on the form.

Code	Description
ASFRD	As-fired sampling
MTH6B	Method 6B sampling
FLCRT	Fuel certification (maintaining receipts per § 60.49b(r)(1))
FLSMP	Fuel certification (based on fuel analysis per § 60.49b(r)(2))
CEM	Continuous emission monitoring system
NONE	No SO <sub>2</sub> monitoring (not applicable if the low sulfur exemption applies)

## **Technology Type:**

Select one of the following technology type options. Enter the code on the form.

Code	Description
FLDBD	Fluidized bed combustion (conventional technology)
DESLF	Flue gas desulfurization service (conventional technology)
EMRG+	Emerging technology with fuel pretreatment
EMRG-	Emerging technology without fuel pretreatment
CONV	Other conventional technology
NONE	No emerging or conventional technology is used to reduce or control SO2 emissions

### **Unit Type:**

Select one of the following unit type options. Enter the code on the form.

Code	Description
FDSTK	Mass feed stoker
SPDSTK	Spreader stoker
DCTBRN1	Duct burner as part of combined cycle system (compliance with NO <sub>x</sub> limitations is determined by conducting a performance test)
DCTBRN2	Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system)
SLGTP	Slag tap furnace
OTHER	Other unit type

★ Complete "Heat Release Rate" only if "Unit Type" is "FDSTK," SPDSTK," "SLGTP," or "OTHER" and "D series Fuel Type" is, alone or in combination, "NG," "DOILL," "DOILLSO3," "DOILLSO5," "ROILLSO5," "RO30+LSO3," or "RO30+LSO5."

### **Heat Release Rate:**

Select one of the following options for heat release rate. Enter the code on the form for each fuel-firing option.

Code	Description
NGLOW	Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft <sup>3</sup>
NGHIGH	Natural gas with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup>
ROLOW	Residual oil with a heat release rate less than or equal to 70 Mbtu/hr/ft <sup>3</sup>
ROHIGH	Residual oil with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup>
DOLOW	Distillate oil with a heat release rate less than or equal to 70 Mbtu/hr/ft <sup>3</sup>
DOHIGH	Distillate oil with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup>

## ★ Complete "Heat Input Gas/Oil" only if "Construction/Modification Date" is "97-05CR" or "05+CR." and "Heat Release Rate" is "NGLOW" or "DOLOW."

#### **Heat Input Gas/Oil:**

Enter "YES" if the facility combusts natural gas or distillate oil in excess of 30 % of the heat input from the combustion of all fuels. Otherwise, enter "NO."

**★** Complete "Heat Input Wood" only if "Construction/Modification Date" is "05+M."

#### **Heat Input Wood:**

Enter "YES" if the facility combusts over 30% wood by heat input. Otherwise, enter "NO."

**★** Complete "Fuel Heat Input" only if "Unit Type" is "DCTBRN1" or "DCTBRN2" and combusting coal or oil.

## **Fuel Heat Input:**

Enter "YES" if the heat input is less than or equal to 30% from combustion of coal and oil in the duct burner and heat input is greater than or equal to 70% of the steam generating unit and is from the exhaust gases entering the duct burner. Otherwise, enter "NO."

## <u>Table 3e</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

**★** Complete "Alternate Emission Limit" only if "D-Series Fuel Type" is "BPW."

## **Alternate Emission Limit (AEL):**

Enter "YES" if the facility combusts byproduct/waste with either natural gas or oil and petitioned the EPA Administrator to establish a NO<sub>x</sub> emission limit that applies specifically when the byproduct/waste is combusted. Otherwise, enter "NO."

#### **AEL ID No.:**

If an alternate emission limit has been approved, then enter the corresponding AEL identification number (ID No.) for each unit or process (maximum 10 characters). If the AEL identification number is unavailable, then enter the date of the approval letter. The identification number and/or the date of the approval letter is contained in the compliance file under the appropriate regulated entity number. Otherwise, leave this column blank.

## **▼** Continue only if "Subpart J" is "YES."

## **Facility Type:**

Enter "YES" if the affected facility includes a fuel gas combustion device. Otherwise, enter "NO."

**▼** Continue only if "Facility Type" is "YES."

## **Monitoring Device:**

Enter "YES" if an instrument is in place for continuous monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gasses before being burned in any fuel gas combustion device. Otherwise, enter "NO."

## **Common Fuel Source:**

Enter "YES" if the fuel gas combustion device has a common fuel source with other fuel gas combustion devices. Otherwise, enter "NO."

<u>Table 4a</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

#### **Construction/Modification Date:**

Select one of the following options that describe the date of commencement of the most recent construction, modification, or reconstruction. Enter the code on the form.

Code	Description
89-	On or before June 9, 1989
89-05	After June 9, 1989, but on or before February 28, 2005
05+	After February 28, 2005

## **▼** Continue only if "Construction/Modification Date" is "89-05" or "05+."

### **Maximum Design Heat Input Capacity:**

Select one of the following options for the maximum design heat input capacity. Enter the code on the form.

Coae	Description
10-	Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW)
10-100	Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less
	than or equal to 100 MMBtu (29 MW)
100+	Maximum design heat input capacity is greater than 100 MMBtu/hr (29 MW) (for SOP
	applications only)

**▼** Continue only if "Maximum Design Heat Input Capacity" is "10-100."

### **Applicability:**

Select one of the following options for the applicability of other 40 CFR Part 60 Subparts. Enter the code on the form.

Code	Description
KKKK	A heat recovery steam generator associated with a stationary combustion turbine that meets the applicability requirements of 40 CFR Part 60, Subpart KKKK.
AAAA	Steam generating unit that meets the applicability requirements of and is subject to 40 CFR Part 60, Subpart AAAA.
CCCC	Steam generating unit that meets the applicability requirements of and is subject to 40 CFR Part 60, Subpart CCCC
BBBB	Steam generating unit that meets the applicability requirements of and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, subpart BBBB.
J/JA	A boiler or steam generating unit located at a refinery that meets the applicability requirements of and is subject to 40 CFR Part 60, Subpart J or Ja.
TEMP	The unit is a temporary boiler.
NONE	Unit is not subject to other 40 CFR Part 60 subparts.

## **▼** Continue only if "Applicability" is "NONE" or "J/JA."

## **Heat Input Capacity:**

Select one of the following options for the heat input capacity. Enter the code on the form.

For units in GOP applications:

Code	Description
NA	Not applicable
For units in S	OP applications:

Code	Description
10-	Heat input capacity is less than or equal to 10 MMBtu/hr (2.9 MW)
10-30	Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW)
30-75	Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to
	75 MMBtu/hr (22 MW)
75-100	Heat input capacity is greater than 75 MMBtu/hr (22 MW)

### **D-Series Fuel Type:**

Select one or more of the following options for the fuel type(s) used to fire the boiler, steam generator, or steam generating unit. Enter the code(s) on the form. In some cases, several fuel type code options could appropriately describe a single fuel being combusted (e.g., distillate oil). In these instances, select one fuel type code which best represents the fuel being combusted. Enter the code on the form.

Code	Description
NG	Natural gas (GOP applicants may only fire natural gas)
DOIL	Distillate oil
ROIL	Residual oil
WD	Wood
OIL	Crude oil, petroleum, or liquid fuel derived from crude oil or petroleum other than distillate or residual oil
COAL	Coal, lignite, petroleum coke, or synthetic fuels derived from coal
OTHER	Other fuel
CLR	Coal Refuse

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the D-Series fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (See Fuel-firing Option A: for an example of multiple types of coal fired simultaneously).

Example:	SOP Index No.	<b>D-Series Fuel Type</b>	<b>D-Series Fuel Type</b>	D-Series Fuel Type	ACF	Option
					S0 <sub>2</sub>	PM
Fuel-firing Option A	60DC-1A	COAL	COAL	COAL	55-CL	
	60DC-1B	COAL				
Fuel-firing Option B	60DC-2	WD				30+WD
Fuel-firing Option C	60DC-3	COAL	OIL			10-OTH

## **▼** Continue only for SOP Applications.

#### **ACF Option:**

Select one of the following ACF options. Enter the code on the form in the space next to the "D-Series Fuel Type" code (FE = Federally Enforceable).

	Code	Description	Citation
$SO_2$	F55-CL	Coal ACF less than or equal to 55% (FE)	[60.42c(c)(2)]
	55+CL	Coal ACF greater than 55%	[60.42c(e)(1)(iii)]
	OTHR	Other ACF or no ACF	
	Code	Description	Citation
PM	10-OTH	Coal with other fuels and other fuels ACF is less	
		than or equal to 10%	[60.43c(a)(1)]
	F10+OTH	Coal with other fuels and other fuels ACF is	
		greater than 10% (FE)	[60.43c(a)(2)]
	30+WD	Wood ACF greater than 30%	[60.43c(b)(1)]
	F30-WD	Wood ACF less than or equal to 30% (FE)	[60.43c(b)(2)]
	OTHR	Other ACF or no ACF	

#### 30% Coal Duct Burner:

Enter YES" if the facility combusts coal in a duct burner as part of a combined cycle system where 30% or less of the heat is from combustion of coal and 70% or more is from exhaust gases entering the duct burner. Otherwise, enter "NO."

## <u>Table 4b</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**★** Complete only if "Construction Date" is "89-05 or 05+" and "Maximum Design Heat Input Capacity" is "10-100." For SOP applications only.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEO website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **Monitoring Type:**

Designate the monitoring options for each pollutant. Select only the type(s) of monitoring applicable under 40 CFR Part 60, Subpart Dc.

#### PM:

Select one of the following monitoring options for particulate matter (PM). Enter the code on the form.

Code	Description
CEMS	Continuous monitoring system for PM and the facility is not subject to a federally enforceable
	PM limit of 0.030 lb/MMBtu or less
CEMS30	Continuous monitoring system for PM and the facility is subject to a federally enforceable PM
	limit of 0.030 lb/MMBtu or less
MTH+	Method 5, 5B or 17 sampling
NONE	No particulate monitoring because there is no applicable PM emission limit.

#### **SO<sub>2</sub> Inlet:**

Select one of the following monitoring options for SO<sub>2</sub> at the control device inlet or outlet of the steam generating unit if no SO<sub>2</sub> control device is used. Enter the code on the form.

Code	Description
ASFRD	Daily as-fired sampling
FLTNK	Shipment fuel sampling
MTH6B	Method 6B sampling
FLCRT	Fuel certification (or maintaining receipts)
CEM	Continuous emission monitoring system
NONE	No SO <sub>2</sub> monitoring because there is no applicable SO <sub>2</sub> emission limit

#### SO<sub>2</sub> Outlet:

Select one of the following monitoring options for SO<sub>2</sub> at the control device outlet. Enter the code on the form.

Code	Description
CEM	Continuous emission monitoring system
MTH6B	Method 6B sampling
NONE	No SO <sub>2</sub> monitoring because there is no applicable SO <sub>2</sub> emission limit

## **Technology Type:**

Select one of the following technology type options. Enter the code on the form.

Code	Description
FLDBD	Fluidized bed combustion (conventional technology)
DESLF	Flue gas desulfurization service (conventional technology)
EMRG	Emerging technology
NONE	No emerging or conventional technology is used to reduce or control SO2 emissions
CONV	Other conventional technology

Complete "43CE-Option" only if "Construction/Modification Date" is "05+" and "Heat Input Capacity" is  $\star$ "30-75" or "75-100" and "D-Series Fuel Type" includes "DOIL," "ROIL," "WD," "OIL," "COAL" or "CLR."

## **43CE-Option:**

Select one of the following § 60.43c(e) PM emission options. Enter the code on the form.

Code	Description
43CE-4	Exemption § 60.43c(e)(4) for a facility that combusts only oil that contains no more than
	0.50% by weight sulfur or a mixture of 0.50% by weight sulfur oil with other fuels not subject to
	a PM standard under § 60.43c and not using a post-combustion technology (except a wet
	scrubber)
43CE-3	§ 60.43c(e)(3) for a facility that has a heat input capacity of 30 MMBtu/hr or greater and that
	combusts over 30% wood (by heat input) on an annual basis
43CE-1	§ 60.43c(e)(1) for a facility that combusts coal, oil, wood, a mixture of these fuels, or a mixture of
	these fuels with any other fuels and has a heat input capacity of 30 MMBtu/hr or greater
43CE-2	§ 60.43c(e)(2) as an alternative § 60.43c(e)(1)

**★** Do not complete "47C-Option" if any of the following conditions are met: "Monitoring Type – PM" is "CEMS30"; "D-Series Fuel Type" is "NG" and/or "OTHER"; or "Heat Input Capacity" is "10-" or "10-30."

## 47C-Option:

Select one of the following § 60.47c PM (Opacity) options. Enter the code on the form.

Code	Description
47C-AB	§ 60.4c(a) and (b) COMS requirements for a facility combusting coal, oil, or wood that is subject
	to the opacity standards under § 60.43c
47C-C	COMS exemption § 60.47c(c) for a facility that burns only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post
	combustion technology
47C-D	§ 60.47c(d) for a facility that complies with the PM emission limit by using a PM CEMS.
47C-E	COMS exemption § 60.47c(e) for a facility that does not use post-combustion technology
	(except a wet scrubber), burns only gaseous fuels or fuel oils that contain less than or equal to
	0.5 weight percent sulfur, and operated such that emissions of CO discharged are maintained at
	levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis
47C-F	COMS exemption § 60.47c(f) for a facility that uses a bag leak detection system to monitor the
	performance of a fabric filter (baghouse) according to the most recent requirements in section
	§ 60.48Da
47C-G	COMS exemption § 60.47c(f) for a facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority

<u>Table 5a</u>: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas

**★** Complete only for units located at industrial, commercial, and institutional (ICI) major sources of NO<sub>x</sub> as defined in 30 TAC § 117.10, and located in the Houston/Galveston/Brazoria, Beaumont/Port Arthur or Dallas/Fort Worth Eight-Hour ozone nonattainment areas.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

## **Unit Type:**

Select one of the following options for the type of service. Enter the code on the form.

Code	Description
ICIB-X	Industrial, commercial, or institutional boiler regulated as an existing facility by the EPA at
	40 CFR Part 266, Subpart H, as was in effect on June 9, 1993
SULF	Sulfur plant reaction boiler
FCCUB	Fluid catalytic cracking unit boiler (including CO boilers) (Beaumont/Port Arthur ozone
	nonattainment area only)
CBCOGEN	A cogeneration boiler utilizing heat or fuel from carbon black reactors (Beaumont/Port Arthur
	ozone nonattainment area)
ICIB	Any other industrial, commercial, or institutional boiler

**▼** Do not continue if "Unit Type" is "SULF," or "ICIB-X" or if located in the Beaumont/Port Arthur ozone nonattainment area and "Unit Type" is "CBCOGEN."

#### MRC:

Select one of the following options for the maximum rated capacity (MRC), as defined in 30 TAC Chapter 117. Enter the code on the form.

For units in GOP applications:

Code	Description
G2-	MRC is less than or equal to 2 MMBtu/hr
G2-40	MRC is greater than 2 MMBtu/hr but less than 40 MMBtu/hr
G40-100	MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr

### For units in SOP applications:

For boilers located in the Beaumont/Port Arthur ozone nonattainment area:

Code	Description
40-	MRC is less than 40 MMBtu/hr
40-100	MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr
100-200	MRC is greater than or equal to 100 MMBtu/hr but less than 200 MMBtu/hr
200-250	MRC is greater than or equal to 200 MMBtu/hr but less than 250 MMBtu/hr
250+	MRC is greater than or equal to 250 MMBtu/hr

For boilers located in the Houston/Galveston/Brazoria ozone or the Dallas/Fort Worth Eight-Hour nonattainment areas:

Code	Description
2-	MRC is less than or equal to 2 MMBtu/hr
2-40	MRC is greater than 2 MMBtu/hr but less than 40 MMBtu/hr
40-100	MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr
100-200	MRC is greater than or equal to 100 MMBtu/hr but less than 200 MMBtu/hr
200-250	MRC is greater than or equal to 200 MMBtu/hr but less than 250 MMBtu/hr
250+	MRC is greater than or equal to 250 MMBtu/hr

- **▼** Do not continue if located in the Beaumont/Port Arthur ozone nonattainment area and "MRC" is "G2-" or "G2-40" for GOP applications; or "40-" for SOP applications.
- **▼** Do not continue if located in the Houston/Galveston/Brazoria or the Dallas/Fort Worth Eight-Hour ozone nonattainment areas and "MRC" is "G2-" for GOP applications; or "2-" for SOP applications.
- **★** Complete "RACT Date Placed in Service" only if located in the Beaumont/Port Arthur ozone nonattainment area.

#### **RACT Date Placed in Service:**

Select one of the following options for the date the unit was placed in service. Enter the code on the form.

Code	Description
92-	On or before November 15, 1992
92-93	After November 15, 1992, and on or before June 9, 1993
93-FCD	After June 9, 1993, and before the final compliance date specified in 30 TAC §§ 117.9000,
	117.9010 or 117.9020
FCD+	On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020

**★** Complete "Functionally Identical Replacement" only if "RACT Date Placed in Service" is "93-FCD."

### **Functionally Identical Replacement:**

Select one of the following options to identify if the unit is a functionally identical replacement for a unit or group of units that were in service on or before November 15, 1992. Enter the code on the form.

Code	Description
YES	Unit is a functionally identical replacement
NO	Unit is not a functionally identical replacement

**▼** Do not continue if located in the Beaumont/Port Arthur ozone nonattainment area and "RACT Date Placed in Service" is "92-93" or "FCD+"; or "RACT Date Placed in Service" is "93-FCD" and "Functionally Identical Replacement" is "NO."

## **Fuel Type:**

Select one of the following options for fuel type. Enter the code on the form.

Code	Description
NG	Natural Gas (GOP applicants for GOPs 511, 512, 513 and 514 must select this option, other applicants may select this option)
GS	Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases (refinery gas or mixtures, etc.)
LFG	Landfill Gas
ORG	Renewable non-fossil fuel gas other than landfill gas
LQD	Liquid
WD	Wood
COKE	Coke (Houston/Galveston/Brazoria ozone Eight-Hour nonattainment areas only)
RICE	Rice Hull (Houston/Galveston/Brazoria ozone Eight-Hour nonattainment areas only)

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (See Fuel-firing Option C: for an example of multiple types of liquid fuel fired simultaneously).

Example:	SOP Index No.	Fuel Type	Fuel Type	Fuel Type
	R7ICI-I	GS	LQD	WD
Fuel-firing Option A	R7ICI-2A	GS	LQD	WD
Fuel-firing Option B	R7ICI-2B	H50-A		
Fuel-firing Option C	R7ICI-3	LQD	LQD	

## **★** Complete "Annual Heat Input" only if application type is SOP.

#### **Annual Heat Input:**

Select one of the following options for the annual heat input. Enter the code on the form.

For units with a "MRC" designation of "40-100:"

Code	Description
28-	Annual Heat Input is less than or equal to 2.8 (10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average
	(Low annual capacity factor boilers)
28+	Annual Heat Input is greater than 2.8 (10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average
ite with a "N	ARC" designation of "100, 200," "200, 250," or "250+"

For units with a "MRC" designation of "100-200," "200-250," or "250+:"

Code	Description
22-	Annual Heat Input is less than or equal to 2.2 (10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average
	(Low annual capacity factor boilers)
22+	Annual Heat Input is greater than 2.2 (10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average

<u>Table 5b</u>: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas

### **▼** Continue only if one of the following conditions is met:

- "Unit Type" is "ICIB-X" or "FCCUB," and the unit is located in the Beaumont/Port Arthur ozone nonattainment area and the unit is to be included in the Alternative Plant-wide Emission Specifications or Source Cap as an Opt-in Unit, or the "Unit Type" is "ICIB" and the unit is located in the Beaumont/Port Arthur or Dallas/Fort Worth Eight-Hour ozone nonattainment areas
- Unit is located in the Houston/Galveston/Brazoria

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

### **NO**<sub>x</sub> Emission Limitation:

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable emission specifications. Select one of the following options. Enter the code on the form.

## For GOP applications

Code	Description
X03B	Title 30 TAC §§ 117.103(b)(1) or 117.303(b)(1) exemption (for all GOP boilers potentially subject to RACT)
103A	Title 30 TAC § 117.103(a)(2) exemption (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area and rated less than 40 MMBtu/hr, may be used for exemption from both RACT and ESAD requirements)
103C	Title 30 TAC § 117.103(c) exemption (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area rated greater than 40 MMBtu/hr and qualifies as a low annual capacity boiler under 30 TAC § 117.103(b)(2), use for exemption from ESAD requirements)
110A	Title 30 TAC § 117.110(a)(1) (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area and rated greater than 40 MMBtu/hr and does not qualify as a low annual capacity boiler, for ESAD applicability.)
310A	Title 30 TAC § 117.310(a) (use for boilers located in the Houston/Galveston/Brazoria ozone nonattainment area)
410A	Title 30 TAC § 117.410(a) (use for boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area)

## For SOP applications

For boilers located in the Beaumont/Port Arthur ozone nonattainment area:

Code	Description
105	Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control
	Technology)
110A	Title 30 TAC § 117.110(a) (use for boilers located in the Beaumont/Port Arthur ozone
	nonattainment area and rated greater than 40 MMBtu/hr and does not qualify as a low annual
	capacity unit.)
APES	Unit is complying with an Alternative Plant-wide Emissions Specification under Title 30 TAC
	§ 117.115
ACSS	Unit is complying with an Alternative Case-specific Specification under Title 30 TAC § 117.125
SC	Unit is complying with a Source Cap under Title 30 TAC § 117.123

For boilers located in the Houston/Galveston/Brazoria ozone nonattainment area:

Code	Description
310D	Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in Chapter 101,
	Subchapter H: Division 3 and Emission Specifications for Attainment Demonstration]
ACF	Boiler is complying with an annual capacity factor specification under Title 30 TAC
	§§ 117.310(d)(3) and 117.310(a)(17)

For boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area:

Code	Description
410A	Title 30 TAC § 117.410(a) (use for boilers located in the Dallas/Fort Worth Eight-Hour ozone
	nonattainment area)
ACF	Boiler is complying with an annual capacity factor specification under Title 30 TAC
	§ 117.410(a)(14)
SC	Unit is complying with a Source Cap under Title 30 TAC § 117.423
405A	Title 30 TAC § 117.405(a) (use for wood-fired boilers located in the Dallas/Fort Worth
	Eight-Hour ozone nonattainment area

## **▼** Continue only if application type is SOP.

**★** Complete "Opt-in Unit" only if the site is located in the Beaumont-Port Arthur ozone nonattainment area and "Emission Limitation" is "APES" or "SC."

## **Opt-In Unit:**

Enter "YES" if the unit is an opt-in unit listed in 30 TAC § 117.115(f) that the owner or operator has chosen to include into the Plant-wide emission or Source Cap to comply with § 117.105 or § 117.110 (for FCCU Unit Type only). Otherwise, enter "NO."

## **★** Complete "23C-Option" only if "NO<sub>x</sub> Emission Limitation" is "SC."

### 23C-Option:

Select one of the following § 117.123(c)(1) or 423(c)(1) options for monitoring. Enter the code on the form.

Code	Description
23C-A	NO <sub>x</sub> , CO, O <sub>2</sub> (or CO <sub>2</sub> ) CEMS and a totalizing fuel flow meter per § 117.123(c)(1)(A) or
	§ 117.423(c)(1)(A).
23C-B	PEMS and a totalizing fuel flow meter per § 117.123(c)(1)(B) or § 117.423(c)(1)(B).
23C-C	Rate measured by hourly emission rate testing per § 117.123(c)(1)(C) or § 117.423(c)(1)(C).

#### ★ Complete "30 TAC Chapter 116 Permit Limit" only if "NO<sub>x</sub> Emission Limitation" is "105."

#### **30 TAC Chapter 116 Permit Limit:**

Select one of the following options for 30 TAC Chapter 116 permit limit. Enter the code on the form.

For units with a 30 TAC Chapter 116 permit in effect on June 9, 1993:

Code	Description
93Y	NO <sub>x</sub> emission limit in 30 TAC § 117.105 is greater than the NO <sub>x</sub> emission limit in a 30 TAC
	Chapter 116 permit
93N	NO <sub>x</sub> emission limit in 30 TAC § 117.105 is not greater than the NO <sub>x</sub> emission limit in a 30 TAC
	Chapter 116 permit

For units placed in service after June 9, 1993, and prior to the final compliance date of 30 TAC § 117.9000 as a functionally identical replacement for an existing unit or group of units and limited to the cumulative MRC of the units replaced:

Code	Description
95Y	Emission limit in 30 TAC § 117.105 is greater than the NO <sub>x</sub> emission limit in any 30 TAC
	Chapter 116 permit issued after June 9, 1993
95N	Emission limit in 30 TAC § 117.105 is not greater than the NO <sub>x</sub> emission limit in any 30 TAC
	Chapter 116 permit issued after June 9, 1993

For existing units without a 30 TAC Chapter 116 permit in effect on June 9, 1993, or for units placed in service after the final compliance date of 30 TAC § 117.9000 as a functionally identical replacement for an existing unit or group of units and limited to the cumulative MRC of the units replaced:

**Code Description** 

N/A NO<sub>x</sub> emission limit in 30 TAC § 117.105 applies for purposes of 30 TAC Chapter 117

## **★** Complete "EGF System Cap Unit" only if located in the Houston/Galveston/Brazoria ozone nonattainment area.

## **EGF System Cap Unit:**

Enter "YES" if the unit is used as an electric generating facility to generate electricity for sale to the electric grid. Otherwise, enter "NO."

Units with electric output entirely dedicated to industrial customers or that generate electricity primarily for internal use are not considered as electric generating facilities generating electricity for sale to the electric grid and are not subject to the system cap requirements of 30 TAC § 117.320. "Entirely dedicated" may include up to two weeks per year of service to the electric grid when the industrial customer's load sources are not operating. Units generating electricity primarily for internal use are those that have previously or will transfer generated electricity to a utility power distribution system at a rate less than 3.85% of actual electrical generation.

## **NO**<sub>x</sub> Emission Limit Average:

Select one of the following options for the NO<sub>x</sub> emission limit. Enter the code on the form.

Code	Description
30DAY	Comply with the applicable emission limit in pounds/MMBtu on a rolling 30-day average
30/24	Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average
BLK1-LB	Comply with the applicable emission limit using block one-hour average
PPMV	Emission limit in parts per million by volume (ppmv)
OTHER	Other emission limit basis

#### NO<sub>x</sub> Reduction:

Select one of the following NO<sub>x</sub> reduction options. Enter the code on the form.

Code	Description
FRCFG	Forced flue gas recirculation
INDFG	Induced flue gas recirculation
WATER	Water or steam injection
POST1	Post combustion control technique with ammonia or urea injection
POST2	Post combustion control technique with chemical reagent injection other than ammonia or urea
OTHER	Other NOx reduction method
NONE	No NO <sub>x</sub> reduction

## **★** Complete "Common Stack Combined" only if the unit is located in the Beaumont/Port Arthur ozone nonattainment area

#### **Common Stack Combined:**

Enter "YES" if the unit is vented through a common stack; the total rated heat input from combined units is greater than or equal to 250 MMBtu/hr and the annual combined heat input is greater than 2.2 (10<sup>11</sup>) Btu/yr. Otherwise, enter "NO."

**Table 5c:** Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B:

Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone

**Nonattainment Areas** 

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **★** Complete "Fuel Type Heat Input" only if "NO<sub>x</sub> Emission Limitation" is "APES."

## **Fuel Type Heat Input:**

Select one of the following options for the annual heat input. Enter the code on the form.

Code	Description
GAS50	Boiler is fired with gaseous and liquid fuel, and derives more than 50% annual heat input from
	gaseous fuel
LIQ50	Boiler is fired with gaseous and liquid fuel, and derives more than 50% annual heat input from
	liquid fuel
SOLID	Boiler is fired with a combination of gaseous (or liquid) and solid fuels
NONE	Boiler is fired with none of the above combinations

Note: Boilers that derive exactly 50% annual heat input from gaseous fuel and 50% from liquid fuel may choose either GAS50 or LIO50.

#### **NO<sub>x</sub> Monitoring System:**

Select one of the following monitoring system options. Enter the code on the form.

Code	Description
75ARC	Acid rain affected unit subject to continuous emissions monitoring requirements of 40 CFR
	Part 75
75ARP	Acid rain affected unit subject to predictive emissions monitoring requirements of 40 CFR
	Part 75
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system
MERT	Maximum emissions rate testing

### **Fuel Flow Monitoring:**

Select one of the following options to indicate how fuel flow is monitored. Enter the code on the form.

Code	Description
X40A	Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or
	117.440(a)
X40A2-A	Unit operates with a NO <sub>x</sub> and diluent CEMS and monitors stack exhaust flow per 30 TAC
	§§ 117.140(a)(2)(A), 117.340(a) (2)(A) or 117.440(a) (2)(A)
X40A2-B	Unit vents to a common stack with a NO <sub>x</sub> and diluent CEMS and uses a single totalizing fuel flow
	meter per 30 TAC §§ 117.140(a)(2)(B), 117.340(a) (2)(B) or 117.440(a) (2)(B)

## **▼** Do not continue if "Opt-in Unit" is "YES."

#### **CO** Emission Limitation:

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable CO emission specifications of 30 TAC Chapter 117, Subchapter B. Select one of the following options. Enter the code on the form.

For boilers located in the Beaumont/Port Arthur ozone nonattainment area:

Code	Description
105F	Title 30 TAC § 117.105(f) [relating to Emissions Specifications for Reasonably Available
	Control Technology (use for unit's subject to RACT in the Beaumont/Port Arthur ozone
	nonattainment area.)
110C	Title 30 TAC § 117.110(c)(1) [relating to Emission Specifications for Attainment Demonstration]
	(use for unit's subject to ESAD requirements in the Beaumont/Port Arthur ozone nonattainment
	area)
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC
	§ 17.125(a)

For boilers located in the Houston/Galveston/Brazoria ozone nonattainment area:

Code	Description
310C	Title 30 TAC § 117.310(c)(1) 400 ppmv option
310CPPMV	Title 30 TAC § 117.310(c)(1) 775 ppmv option for wood-fuel-fired boilers
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC
	§ 117.325(a)

For boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area:

Code	Description
410C	Title 30 TAC § 117.410(c)(1) [relating to Emission Specifications for Attainment Demonstration]
	(use for unit's subject to ESAD requirements in the Dallas/Fort Worth Eight-Hour ozone nonattainment area.)
405D	Title 30 TAC § 117.405(d)(1) [use for wood fired units subject to Reasonably Available Control
	Technology (RACT) requirements]
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC
	§ 117.425(a)

### **CO Monitoring System:**

Select one of the following options to indicate how the unit is monitored for CO exhaust emissions. Enter the code on the form.

Code	Description
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system
OTHER	Other than CEMS or PEMS

## **▼** Continue only if "NO<sub>x</sub> Reduction" is "POST1."

### NH<sub>3</sub> Emission Limitation:

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NH<sub>3</sub> emission specifications of 30 TAC Chapter 117. Select one of the following options. Enter the code on the form.

For boilers located in the Beaumont/Port Arthur ozone nonattainment area:

Code	Description
105G	Title 30 TAC § 117.105(g) [relating to Emission Specifications for Reasonably Available Control
	Technology]
110C	Title 30 TAC § 117.110(c)(2) [relating to Emission Specifications for Attainment Demonstration]
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC
	§ 117.125(a)

For boilers located in the Houston/Galveston/Brazoria ozone nonattainment area:

Code	Description
310C	Title 30 TAC § 117.310(c)(2) [relating to Emission Specifications for Attainment Demonstration]
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC
	§ 117.325(a)

For boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area:

Code	Description
410C	Title 30 TAC § 117.410(c)(2) [relating to Emission Specifications for Attainment Demonstration]
405D	Title 30 TAC § 117.405(d)(2) [use for wood fired units subject to Reasonably Available Control
	Technology (RACT) requirements]
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC § 117.425.

Note: If using some other alternative, such as an alternate reasonably available control technology, alternate means of control, or emission reduction credit, the type of alternate used will need to be explained in a cover letter or some other attachment to the permit application.

# NH<sub>3</sub> Monitoring:

Select one of the following options to indicate how the unit is monitored for NH<sub>3</sub> emissions. Enter the code on the form.

Code	Description
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system
MBAL	Mass balance
OXY	Oxidation of ammonia to nitric oxide (NO)
STUBE	Stain tube

**Table 6a:** Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter C:

Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment Areas

- **★** Complete Tables 6a and 6b only for utility boilers or auxiliary steam boilers that are:
  - included in an SOP application;
  - used in an electric power generating system owned or operated by an electric cooperative, municipality, river authority, public utility, or a Public Utility Commission (PUC) of Texas regulated utility or any of their successors; and
  - located within the Houston/Galveston/Brazoria, Beaumont/Port Arthur, or Dallas/Fort Worth Eight-Hour ozone nonattainment areas.

The Dallas/Fort Worth Eight-Hour ozone nonattainment area consists of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties.

Sites located in Parker County have applicability under both 30 TAC Chapter 117, Subchapter C: Division 4 and under 30 TAC Chapter 117, Subchapter E: Division 1: Utility Electric Generation in East and Central Texas and should complete both Tables 6a - 6b and Tables 9a - 9c to determine requirements.

Independent power producers in Parker County are subject only to the requirements of 30 TAC Chapter 117, Subchapter E: Division 1: Utility Electric Generation in East and Central Texas and should complete only Tables 9a - 9c.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

#### **Date Placed in Service:**

Select one of the following options for the date the unit was placed in service. Enter the code on the form.

Code	Description
92-	On or before November 15, 1992
92-93	After November 15, 1992, and on or before June 9, 1993
93-FCD	After June 9, 1993, and before the final compliance date in 30 TAC §§ 117.9100 or 117.9120
FCD+	On or after the final compliance date in 30 TAC §§ 117.9100 or 117.9120

**★** Complete "Functionally Identical Replacement" only if "Date Placed in Service" is "92-93," or "93-FCD," or "FCD+" and located in Beaumont/Port Arthur ozone nonattainment area.

## **Functionally Identical Replacement:**

Select one of the following codes to identify if the unit is a functionally identical replacement for a unit or group of units. Enter the code on the form.

Code	Description
YES	Unit is a functionally identical replacement
NO	Unit is not a functionally identical replacement

## **Annual Heat Input:**

Select one of the following options for the annual heat input. Enter the code on the form.

Code	Description
22-	Annual heat input is less than or equal to 2.2 (10 <sup>11</sup> ) Btu/yr
22+	Annual heat input is greater than 2.2 (10 <sup>11</sup> ) Btu/yr

#### Service Type:

Select one of the following options for the type of service. Enter the code on the form.

Code	Description
UTIL	Utility boiler (other than peaking service)
AUX-D	Auxiliary boiler that is an affected facility under 40 CFR Part 60, Subpart D, Db, or Dc
AUX	Auxiliary boiler that is not an affected facility under 40 CFR Part 60, Subpart D, Db, or Dc

▼ Continue if "Annual Heat Input" is "22+," and "Date Placed in Service" is "92-"; or "Date Placed in Service" is "93-FCD" and "Functionally Identical Replacement" is "YES."

#### Fuel Type

Select one of the following options for fuel type. Enter the code on the form.

Code	Description
NG	Natural gas (gaseous)
CL	Coal
FO	Fuel oil (liquid)
WST	Waste oil (liquid)

If a fuel-firing option consists of multiple fuel types being combusted simultaneously, enter the 30 TAC Chapter 117 fuel type code for each fuel in a separate column on the same line, with a single SOP index number. If there are more than three fuels being combusted simultaneously, use multiple lines, and start each line with a different SOP index number. Start each additional fuel-firing option on a different line with a different SOP index number. If multiple fuels that use the same code are simultaneously combusted, then enter the code once for each fuel (See Fuel-firing Option C: for an example of multiple types of fuel oil fired simultaneously).

Example:
Fuel-firing Option A
Fuel-firing Option B
Fuel-firing Option C

SOP Index No.	Fuel Type	Fuel Type	Fuel Type
R7UT-1	NG	CL	
R7UT-2A	NG	CL	FO
R7UT-3	NG	FO	FO

# **★** Complete "RACT NO<sub>x</sub> Emission Limitation" only if the site is located in the Beaumont/Port Arthur ozone nonattainment area and "Service Type" is "AUX" or "AUX-D."

## **RACT NO<sub>x</sub> Emission Limitation:**

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NO<sub>x</sub> limitation standards listed in 30 TAC § 117.1005. Select one of the following options. Enter the code on the form.

Code	Description
X05	Title 30 TAC § 117.1005 [relating to Emission Specifications for Reasonably Available Control
	Technology]
ACSS	Title 30 TAC § 117.1025, [relating to Alternative Case Specific Specifications]

Note: If using some other alternative, such as an alternate reasonably available control technology, alternate means of control, or emission reduction credit, the type of alternate used will need to be explained in a cover letter or some other attachment to the permit application.

## **★** Complete "ESAD NO<sub>x</sub> Emission Limitation" only if "RACT NO<sub>x</sub> Emission Limitation" was NOT completed.

#### **ESAD NO<sub>x</sub> Emission Limitation:**

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NO<sub>x</sub> limitation standards listed in 30 TAC §§ 117.1010, 117.1210, or 117.1310. Select one of the following options. Enter the code on the form.

Code	Description
X10	Title 30 TAC §§ 117.1010 or 117.1310 [relating to Emission Specifications for Attainment
	Demonstration]
SC	Title 30 TAC § 117.1020 [relating to System Cap]
1201-	Unit complying with any applicable permit limit in a permit issued before January 2, 2001, in
	lb/MMBtu heat input as specified in § 117.1220 [relating to System Cap] and 30 TAC Chapter
	101, Subchapter H: Division 3
1201+	Unit complying with any applicable permit limit in a permit issued on or after January 2, 2001,
	that the owner or operator submitted an application determined to be administratively complete
	by the E.D. before January 2, 2001, in lb/MMBtu heat input as specified in § 117.1220
	[relating to System Cap] and 30 TAC Chapter 101, Subchapter H: Division 3
12PBR	Unit complying with any applicable permit limit in a permit by rule under which construction
	commenced by January 2, 2001, that the owner or operator submitted an application determined
	to be administratively complete by the E.D. before January 2, 2001, in lb/MMBtu heat input as
	specified in § 117.1220 [relating to System Cap] and 30 TAC Chapter 101, Subchapter H:
	Division 3
1210	Title 30 TAC § 117.1210 [relating to Emission Specifications for Attainment Demonstration]
	(not complying with any above emission specifications)

# **★** Complete "EGF" only if located in the Houston/Galveston/Brazoria ozone nonattainment area.

#### EGF:

Enter "YES" if the unit meets the definition of an electric generating facility (EGF). Otherwise, enter "NO."

**Table 6b**: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter C:

Combustion Control at Major Utility Electric Generation Sources in Ozone Non-Attainment Areas

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

**★** Complete "Fuel Firing Option" only if the site is located in the Houston/Galveston/Brazoria ozone nonattainment area and "ESAD NO<sub>x</sub> Emission Limitation" is "1210" and "Service Type" is "UTIL."

## **Fuel Firing Option:**

Title 30 TAC Chapter 117 provides two methods to be in compliance with the applicable NO<sub>x</sub> limitation standards listed in 30 TAC § 117.1210(a)(1)(B). Select one of the following options. Enter the code on the form.

Code	Description
WALL	Wall-fired
TANG	Tangential fired

**★** Complete "ESAD NO<sub>x</sub> Emission Limitation for DFW 8-Hour" only if the site is located in the Dallas/Fort Worth Eight Hour ozone nonattainment area and "ESAD NO<sub>x</sub> Emission Limitation" is "X10" and "Service Type" is "UTIL."

# ESAD NO<sub>x</sub> Emission Limitation for DFW 8-Hour:

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NO<sub>x</sub> limitation standards listed in 30 TAC § 117.1310. Select one of the following options. Enter the code on the form.

Code	Description
SMALL	Unit part of a small utility system as defined in § 117.10
ANNUAL	Unit calculating emissions on an annual average basis lb/MW-hr
LRG-SW	Unit part of a large utility system calculating emissions on a system-wide heat input weighted
	average basis
LRG	Unit part of a large utility system not calculating emissions on a system-wide heat input weighted
	average basis

#### **NO<sub>x</sub> Monitoring System:**

Select one of the following monitoring system options. Enter the code on the form.

Code	Description
75-E	Monitoring operating parameters in accordance with 40 CFR Part 75, Appendix E
CEMS	Continuous emission monitoring system
PEMS	Predictive emission monitoring system in accordance with 30 TAC §§ 117.1040(f), 117.1240(g) or 117.1340(g)
1HR	Monitoring operating parameters using the maximum block 1-hour emission rate as measured by the 30-day test
NONE	Not using any of the above options

**★** Complete "Title 30 TAC Chapter 116 Permit Limit" only if in the Beaumont/Port Arthur ozone nonattainment area, "RACT NO Emission Limitation" is "X05" and the unit is an auxiliary steam boiler.

## **Title 30 TAC Chapter 116 Permit Limit:**

Select one of the following descriptions of the 30 TAC Chapter 116 permit limit. Enter the code on the form.

Code
82Y
Emission limit in a 30 TAC Chapter 116 permit issued after March 3, 1982, is equal to 0.12-pound NO<sub>x</sub> per MMBtu heat input

For units having a 30 TAC Chapter 116 permit in effect on June 9, 1993:

Code	Description
93Y	NO <sub>x</sub> emission limit in 30 TAC § 117.1005 is greater than the NO <sub>x</sub> emission limit in a 30 TAC
	Chapter 116 permit
93N	NOx emission limit in 30 TAC § 117.1005 is not greater than the NO <sub>x</sub> emission limit in a 30 TAC
	Chapter 116 permit

For units placed into service after June 9, 1993, and prior to the final compliance date in 30 TAC § 117.9100, as functionally identical replacement for an existing unit or group of units and limited to the cumulative maximum rated capacity of the units replaced:

Code	Description
95Y	Emission limit in 30 TAC § 117.1005 is greater than the NO <sub>x</sub> emission limit in any 30 TAC
	Chapter 116 permit issued after June 9, 1993
95N	Emission limit in 30 TAC § 117.1005 is not greater than the NO <sub>x</sub> emission limit in any 30 TAC
	Chapter 116 permit issued after June 9, 1993

#### **CO** Emission Limitation:

Title 30 TAC Chapter 117 provides options to be in compliance with the applicable CO emission specifications of 30 TAC Chapter 117, Subchapter C. Select one of the following options. Enter the code on the form.

Code	Description
1005	Title 30 TAC § 117.1005(h) [relating to Emission Specifications for Reasonably Available
	Control Technology] (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area)
1010	Title 30 TAC § 117.1010(b)(1) [relating to Emission Specifications for Attainment
	Demonstration] (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area)
1210	Title 30 TAC § 117.1210(b)(1) [relating to Emission Specifications for Attainment
	Demonstration] (use for boilers located in the Houston/Galveston/Brazoria ozone nonattainment area)
1310	Title 30 TAC § 117.1310(b)(1)(A) [relating to Emission Specifications for Eight-Hour
	Attainment Demonstration] (use for boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area)
ACSS	Unit is complying with an Alternative Case Specific Specifications under 30 TAC §§ 117.1025,
	117.1225 or 117.1325

# **CO Monitoring System:**

Select one of the following monitoring system options. Enter the code on the form.

Code	Description
CEMS	Continuous emission monitoring system
PEMS	Predictive emission monitoring system in accordance with 30 TAC §§ 117.1040(f), 117.1240(g)
	or 117.1340(g)
NONE	Not using CEMS or PEMS

#### Ammonia Use:

Enter "YES" if urea or ammonia injection is used to control NO<sub>x</sub> emissions. Otherwise, enter "NO."

# **▼** Continue only if "Ammonia Use" is "YES."

#### NH<sub>3</sub> Emission Limitation:

Title 30 TAC Chapter 117 provides two methods to be in compliance with the applicable NH<sub>3</sub> limitation standards listed in 30 TAC Chapter 117, Subchapter C. Select one of the following options. Enter the code on the form.

Code	Description
1005	Title 30 TAC § 117.1005(j) [relating to Emission Specifications for Reasonably Available
	Control Technology] (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area)
1010	Title 30 TAC § 117.1010(b)(2) [relating to Emission Specifications for Attainment
	Demonstration] (use for boilers located in the Beaumont/Port Arthur ozone nonattainment area)
1210	Title 30 TAC § 117.1210(b)(2) [relating to Emission Specifications for Attainment
	Demonstration] (use for boilers located in the Houston/Galveston/Brazoria ozone nonattainment area)
1310	Title 30 TAC § 117.1310(b)(2) [relating to Emission Specifications for Eight-Hour Attainment
	Demonstration] (use for boilers located in the Dallas/Fort Worth Eight-Hour ozone nonattainment area)
ACSS	Unit is complying with an Alternative Case Specific Specification under 30 TAC §§ 117.1025,
	117.1225 or 117.1325

## NH<sub>3</sub> Monitoring System:

Select one of the following monitoring system options. Enter the code on the form.

240(g)
,,,

# <u>Table 7</u>: Title 30 Texas Administrative Code Chapter 112 (30 TAC Chapter 112), Subchapters A–D: Control of Air Pollution from Sulfur Compounds

### ★ Complete only for units combusting liquid fuel or solid fossil fuel. Complete only for SOP applications.

## **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

## **Fuel Type:**

Select one of the following options for the fuel type as it pertains to 30 TAC Chapter 112. Enter the code on the form.

For units located in Harris or Jefferson County:

Code	Description
SLD-HJ	Solid fossil fuel
LQD+3	Liquid fuel with a sulfur content greater than 0.3% by weight
LQD-3	Liquid fuel with a sulfur content less than or equal to 0.3% by weight

For units located in other counties:

Code	Description
SLD	Solid fossil fuel
LQD	Liquid fuel

# **★** Complete "Date of Operation" only for units located in Milam County and with "Fuel Type" designation of "SLD."

## **Date of Operation:**

Select one of the following options for the date of operation. Enter the code on the form.

Code	Description
55-	Began operation before January 1, 1955
55+	Began operation on or after January 1, 1955

## **Heat Input:**

Select one of the following options for the design heat input. Enter the code on the form.

For units with "Fuel Type" designation of "SLD" or "SLD-HJ:"

Code	Description
250S-	Design heat input is less than or equal to 250 MMBtu/hr
25-15H	Design heat input is greater than 250 MMBtu/hr but less than or equal to 1500 MMBtu/hr
15H+	Design heat input is greater than 1500 MMBtu/hr

For units with "Fuel Type" designation of "LQD," "LQD+3," or "LQD-3:"

Code	Description
250L-	Design heat input is less than or equal to 250 MMBtu/hr
250+	Design heat input is greater than 250 MMBtu/hr

# ★ Complete "Control Equipment" only if "Heat Input" is "25-15H," "15H+," or "250+."

# **Control Equipment:**

Select one of the following options for SO<sub>2</sub> control equipment. Enter the code on the form.

Code	Description
$SO_2$	Unit equipped with SO <sub>2</sub> control equipment
NONE	Unit not equipped with SO <sub>2</sub> control equipment

# ★ Complete "FCAA § 412(c)" only if "Control Equipment" is "SO<sub>2</sub>."

#### FCAA 8 412(c):

Enter "YES" if the unit is subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990. Otherwise, enter "NO."

## ★ Complete "Stack Height" only if "Fuel Type" is "LQD," "LQD+3," or "LQD-3."

## **Stack Height:**

Enter "YES" if the effective stack height is less than the standard effective stack height for each stack to which the unit routes emissions. Otherwise, enter "NO."

# <u>Table 8a</u>: Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113), Subchapter D: Hospital/Medical/Infectious Waste Incinerators

**★** Complete this table only for an existing hospital/medical/infectious waste incinerator (HMIWI) as defined in 30 TAC § 113,2070.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the boiler (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information, relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

#### **Construction Date:**

Select one of the following options that describe the date of commencement of the most recent construction. Enter the code on the form.

Code	Description
-96	On or before June 20, 1996
+96	After June 20, 1996

# **▼** Continue only if "Construction Date" is "-96."

# **Combustor Type:**

Enter "YES" if the HMIWI unit meets one of the combustor types specified in Table 1 of 30 TAC § 113.2070. Otherwise, enter "NO.

**★** Complete "Type of Waste" and "Co-Fired Combustor" only if "Combustor Type" is "YES."

#### **Type of Waste:**

Enter "YES" if the boiler is burning only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste. Otherwise, enter "NO."

## **CO-Fired Combustor:**

Enter "YES" if the boiler is a co-fired combustor as defined in 30 TAC § 113.2070. Otherwise, enter "NO."

# **▼** Continue only if "Combustor Type" is "NO."

#### **HMIWI Size:**

Enter "YES" if the incinerator is a small remote HMIWI as defined in 30 TAC § 113.2070. Otherwise, enter "NO."

## **▼** Continue only if "HMIWI SIZE" is "YES."

#### **Control Device:**

Enter "YES" if the boiler is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by both a fabric filter and a wet scrubber. Otherwise, enter "NO."

#### PM CEMS:

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the PM emission limit. Otherwise, enter "NO."

## **Opacity Monitoring:**

Select one of the following options that describe the method used to demonstrate compliance with the opacity emission limit. Enter the code on the form.

Code	Description
COMS	Continuous opacity monitoring system
EQUIV	Equivalent opacity monitor approved by the EPA Administrator
NONE	No opacity monitoring system

## **Approved Equivalent ID No.:**

If an equivalent opacity monitor has been approved, then enter the corresponding equivalent opacity monitor unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the equivalent opacity monitor approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate regulated entity number. Otherwise, leave this column blank.

Table 8b:	Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113), Subchapter D:
	Hospital/Medical/Infectious Waste Incinerators

#### Unit ID No.:

Enter the identification number (ID No.) for the incinerator (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceg.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **Commercial Unit:**

Enter "YES" if the unit has a commercial medical waste incinerator, or if it burns more than 200 lbs/hr of hospital waste or medical/infectious waste. Otherwise, enter "NO."

#### **CO** Monitoring:

Select one of the following options that describe the method used to demonstrate compliance with the CO emission limit. Enter the code on the form.

Code	Description
CEMS	Continuous emission monitoring system (CEMS)
EQUIV	Equivalent CO monitor approved by the EPA Administrator
NONE	No CO monitoring system

# **Approved Equivalent ID No.:**

If an equivalent CO monitor has been approved, then enter the corresponding equivalent CO monitor unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the equivalent CO monitor approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate regulated entity number. Otherwise, leave this column blank.

## **Dioxins/Furans CEMS:**

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the dioxins/furans emission limit. Otherwise, enter "NO."

### **Toxic Equivalent Method:**

Enter "YES" if the toxic equivalent quantity method as described in 30 TAC § 113.2075(a)(1)(F) is used to determine compliance with the dioxins/furans emission limit. Otherwise, enter "NO."

#### **HCL CEMS:**

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the HCL emission limit. Otherwise, enter "NO."

### **HCL Percentage Reduction Method:**

Enter "YES" if the percentage reduction method as described in 30 TAC § 113.2075(a)(1)(G) is used to determine compliance with the HCL emission limit. Otherwise, enter "NO."

# <u>Table 8c</u>: Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113), Subchapter D: Hospital/Medical/Infectious Waste Incinerators

#### Unit ID No.:

Enter the identification number (ID No.) for the incinerator (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titley/ty\_fop\_guidance.html.

#### Pb CEMS:

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the Pb emission limit. Otherwise, enter "NO."

# **Pb Percentage Reduction Method:**

Enter "YES" if the percentage reduction method as described in 30 TAC § 113.2075(a)(1)(G) is used to determine compliance with the Pb emission limit. Otherwise, enter "NO."

### **Cd CEMS:**

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the Cd emission limit. Otherwise, enter "NO."

#### **Cd Percentage Reduction Method:**

Enter "YES" if the percentage reduction method as described in 30 TAC § 113.2075(a)(1)(G) is used to determine compliance with the Cd emission limit. Otherwise, enter "NO."

#### Hg CEMS:

Enter "YES" if the incinerator uses a continuous emissions monitoring system (CEMS) to demonstrate compliance with the Hg emission limit. Otherwise, enter "NO."

## **Hg Percentage Reduction Method:**

Enter "YES" if the percentage reduction method as described in 30 TAC § 113.2075(a)(1)(G) is used to determine compliance with the Hg emission limit. Otherwise, enter "NO."

<u>Table 9a</u>: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter E: Division 1: Utility Electric Generation in East and Central Texas

- **★** Complete tables 9a through 9c only for utility electric power boilers and steam generating units generating electric energy for compensation used in an electric power generating system owned or operated by an electric cooperative, independent power producer, municipality, river authority, or public utility, or any of its successors.
- ★ Complete tables 9a through 9c only for facilities located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Palo Pinto, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

Sites owned or operated by an electric cooperative, municipality, river authority, or public utility located in Parker County have applicability under both 30 TAC Chapter 117, Subchapter C: Division 4: Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources and under 30 TAC Chapter 117, Subchapter E, Division 1: Utility Electric Generation in East and Central Texas and should complete both Tables 9a - 9c and Tables 6a - 6b to determine requirements.

Independent power producers in Parker County are subject only to the requirements of 30 TAC Chapter 117, Subchapter E: Division 1: Utility Electric Generation in East and Central Texas and should complete only Tables 9a - 9c.

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

#### **Date Placed in Service:**

Select one of the following options for the date the unit was placed in service. Enter the code on the form.

Code	Description
95-	Before December 31, 1995
95+	On or after December 31, 1995

## **▼** Continue only if "Date Placed in Service" is "95-."

#### Unit Exempt

Select one of the following options that describes the unit. Enter the code on the form.

Code	Description
INTUSE	The unit generates electric energy primarily for internal use but averaged over the three most
	recent calendar years, has sold less than one third of its potential electrical output capacity to a
	utility power distribution system
HEATIN	The unit has an annual heat input of 2.2 (10 <sup>11</sup> ) Btu/yr or less, averaged over the three most recent
	calendar years
NONE	The unit does not qualify for any exemptions under the rule

# **▼** Continue only if "Unit Exempt" is "NONE."

#### **Location:**

Enter "YES" if the unit is a gas-fired steam generator located in Palo Pinto County as specified in 30 TAC § 117.3005(a). Otherwise, enter "NO."

## **★** Complete Table 9b if "Location" is "NO." Do not complete the rest of Table 9a.

# Capacity:

Select one of the following options that describe the capacity of the gas-fired steam generating unit. Enter the code on the form

Code	Description
6-	The unit has the capacity to generate less than 600,000 lb/hr of steam continuously
6-11	The unit has the capacity to generate more than 600,000 lb/hr but less than 1,100,000 lb/hr of
	steam continuously
11+	The unit has the capacity to generate more than 1,100,000 lb/hr of steam continuously

- **▼** Do not continue if "Capacity" is "6-."
- **★** Complete"30% of the Max" only if "Capacity" is "6-11."

#### 30% of the Maximum:

Enter "YES" if the total steam generated from the unit is less than or equal to 30% of the maximum continuous steam capacity times the number of hours in a year. Otherwise, enter "NO."

# **★** Do not complete "Firing Method" if "30% of Max." is "YES."

## **Firing Method:**

Select the option that describes the firing method for the unit. Enter the code on the form.

Code	Description
OFG	The unit is an opposed-fire steam generating unit
FFG	The unit is a front-fired steam generating unit
TFG	The unit is a tangential-fired steam generating unit

# <u>Table 9b</u>: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter E: Division 1: Utility Electric Generation in East and Central Texas

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

Do not continue if "Location" is "YES."

#### **NO**<sub>x</sub> Emission Limitation:

Title 30 TAC Chapter 117 provides two methods to be in compliance with the applicable  $NO_x$  limitation standards listed in 30 TAC § 117.3010(1). Select one of the following options. Enter the code on the form.

Code	Description
3010	Title 30 TAC § 117.3010(1) [relating to Emission Specifications
SC	Unit is complying with the System Cap under 30 TAC § 117.3020

# **★** Complete "Fuel" only if "NO<sub>x</sub> Emission Limitation" is "3010."

#### **Fuel:**

Select one of the following options that describes the fuel fired in the unit. Enter the code on the form.

Code	Description
COAL	The unit is a coal fired electric power boiler
GAS	The unit is a gas fired electric power boiler

# **NO<sub>x</sub> Monitoring:**

Select one of the following options that describes the NO<sub>x</sub> monitoring used. Enter the code on the form.

Code	Description
CEMS	A continuous emissions monitoring system is used to monitor NO <sub>x</sub> emissions
PEMS	A parametric emissions monitoring system is used to monitor NO <sub>x</sub> emissions

#### **Maximum Emission Rate:**

Enter "YES" if the owner or operator is using the maximum emission rate measured by the testing conducted in § 117.3035(d) to provide substitute emissions compliance when the NO<sub>x</sub> monitor is off-line. Otherwise, enter "NO."

#### **Ammonia Use:**

Enter "YES" if urea or ammonia injection is used to control NO<sub>x</sub> emissions. Otherwise, enter "NO."

# **▼** Continue only if "Ammonia Use" is "YES."

## NH<sub>3</sub> Emission Limitation:

Title 30 TAC Chapter 117 provides two methods to be in compliance with the applicable NH<sub>3</sub> limitation standards listed in 30 TAC Chapter 117, Subchapter E. Select one of the following options. Enter the code on the form.

Code	Description
3010	Title 30 TAC § 117.3010(2) [relating to Emission Specifications]
ACSS	Unit is complying with an Alternative Case Specific Specification under 30 TAC § 117.3025
ania Manida.	

# **Ammonia Monitoring:**

Select one of the following options that describes the ammonia monitoring used. Enter the code on the form.

Code	Description
CEMS	A continuous emissions monitoring system is used to monitor ammonia emissions
PEMS	A parametric emissions monitoring system is used to monitor ammonia emissions
OTHER	A monitoring system other than a CEMS or PEMS is used to monitor ammonia emissions

<u>Table 10a</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart EEE: Hazardous Waste Combustors

**★** Complete this table for solid or liquid fueled boilers that burn hazardous waste, and are located at an area source or a major source, and do not meet the criteria in Table 1 of § 63.1200(b)

## **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **Type Fuel:**

Select one of the following options. Enter the code on the form.

Code	Description
SOLID	Boiler burns solid fuel
LIQUID	Boiler burns liquid fuel

#### **Existing Source:**

Enter "YES" if the boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004). Otherwise, enter "NO."

#### **Area Source:**

Enter "YES" if the boiler is an area source as defined under §63.2. Otherwise, enter "NO."

**★** Complete "Elective Standards" only if "Area Source" is "YES."

## **Elective Standards:**

Enter "YES" if the area source is electing to comply with § 63.1216 or § 63.1217 per § 266.100(b)(3). Otherwise, enter "NO."

# Dioxin/Furan Standard:

Select one of the following options. Enter the code on the form.

For solid fuel boilers:

Code	Description
CO-1S	Complying with the CO standard in § 63.1216(a)(1) or (b)(1)
THC-1S	Complying with the THC standard in § 63.1216(a)(1) or (b)(1)
For liquid fuel	boilers:

Code	Description
DF-1L	Complying with the dioxin/furan standard in § 63.1217(a)(1)(i) or (b)(1)(i) [Note: for boilers
	equipped with a dry air pollution control system]
CO-1L	Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1) (ii)
THC-1L	Complying with the THC standard in § 63.1217(a)(1) (ii) or (b)(1) (ii)

## **★** Complete "Heating Value" only if "Type Fuel" is "LIQUID."

## **Heating Value:**

Enter "YES" if the hazardous waste as-fired heating value is less than 10,000 Btu/lb. Otherwise, enter "NO."

### **Hg Feedrate:**

Enter "YES" if extrapolation of feedrate levels is used for Hg. Otherwise, enter "NO."

# <u>Table 10b</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart EEE: Hazardous Waste Combustors

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

#### **ALT Metals:**

Enter "YES" if in lieu of complying with the particulate matter standards, you elect to comply with the alternative metal emission control requirement. Otherwise, enter "NO."

#### **MET Feedrate:**

Enter "YES" if extrapolation of feedrate levels is used for semivolatile and low volatile metals. Otherwise, enter "NO."

#### **CO/THC Standard:**

Select one of the following options. Enter the code on the form.

Code	Description
CO-5	Complying with the CO standard in § 63.1216(a)(5)(i) or (b)(5)(i); or § 63.1217(a)(5)(i) or
	(b)(5)(i)
THC-5	Complying with the THC standard in § 63.1216(a)(5)(ii) or (b)(5)(ii); or § 63.1217(a)(5)(ii) or (b)(5)(ii)

## **Baghouse:**

Enter "YES" if the furnace is equipped with a baghouse. Otherwise, enter "NO."

# **★** Complete "PM Detection" only if "Baghouse" is "YES."

#### **PM Detection:**

Enter "YES" if a PM detection system is used. Otherwise, enter "NO."

#### **Dioxin-Listed:**

Enter "YES" if the furnace burns the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027. Otherwise, enter "NO."

#### **DRE Previous Test:**

Enter "YES" if previous testing was used to document conformance with the DRE standard. Otherwise, enter "NO."

## **★** Complete "Feed Zone" only if "DRE Previous Test" is "YES."

#### Feed Zone:

Enter "YES" if the source feeds waste at a location other than the normal flame zone. Otherwise, enter "NO."

# **Table 11**: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111), Subchapter A: Division 2: Incineration

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **Hazardous Waste:**

Enter "YES" if the unit combusts hazardous waste as a fuel for energy recovery and the facility accepts hazardous waste as a fuel from off-site sources which involves a commercial transaction or a change of ownership of the waste and the facility is not regulated at 40 CFR Part 264 or 265, Subpart O. Otherwise, enter "NO."

**▼** Continue only if "Hazardous Waste" is "YES."

#### **Monitor:**

Enter "YES" if the unit has a continuous opacity or carbon monoxide monitor (or equivalent). Otherwise, enter "NO."

# <u>Table 12</u>: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111), Subchapter A: Division 5: Emission Limits on Nonagricultural Processes

★ Complete this table only for solid fossil fuel-fired steam generators or oil or gas fuel-fired steam generators with a heat input greater than 2,500 million Btu per hour that have to address periodic monitoring (PM) or compliance assurance monitoring (CAM) requirements for 30 TAC Chapter 111, Nonagricultural Processes. Sources that do not have to address PM or CAM for this regulation are covered on form OP-REQ1.

*Steam generators that meet the applicability of CAM:* 

- Have a pre-control potential to emit that equals or exceeds the major source threshold for particulate matter; and
- Use a control device to meet the particulate matter emission limit specified in 30 TAC §111.153(b) or (c). Steam generators that are not subject to CAM may require periodic monitoring for assuring compliance with the particulate matter emission limit in 30 TAC §111.153(b) or (c). Periodic monitoring is required for all steam generators where the actual emissions of particulate matter exceed 50 tons per year.

CAM and periodic monitoring requirements must be submitted separately on form OP-MON.

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

## **Source Type:**

Select one of the following options. Enter the code on the form.

**Code Description** 

SOLID Solid fossil fuel-fired steam generator

OIL/GAS Oil or gas fuel-fired steam generator with a heat input greater than 2,500 million Btu per hour

# <u>Table 13a</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

# **★** Complete this table for a coal fired EGU or an oil-fired EGU defined in §63.10042

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

#### §63.9983(a):

Enter "YES" if the unit is designated a stationary combustion turbine, other than an IGCC unit, covered by 40 CFR Part 63, Subpart YYYY, per §63.9983(a). Otherwise, enter "NO."

### §63.9983(b):

Enter "YES" if the unit is not coal- or oil-fired and combusts natural gas in accordance with §63.9983(b). Otherwise, enter "NO."

#### §63.9983(c):

Enter "YES" if the unit can combust more than 25 MW of coal or oil but does so in accordance with §63.9983(c). Otherwise, enter "NO."

#### §63.9983(d):

Enter "YES" if the unit combusts hazardous waste per §63.9983(d). Otherwise, enter "NO."

## **▼** Continue only if "§63.9983(a), (b), (c) and (d)" are all "No."

#### **Limited-use Liquid:**

Enter "YES" if the unit qualifies as a limited-use liquid oil-fired unit as defined in §63.10042. Otherwise, enter "NO."

#### **Construction Status:**

Select one of the following options that describes the construction status. Enter the code on the form.

Code	Description
NEW	The EGU is new (i.e. construction commenced after May 3, 2011 and meets the applicability
	criteria at the time construction commenced)
RECON	The EGU is reconstructed (i.e. reconstruction criteria as defined in §63.2 is met, construction
	commenced after May 3, 2011, and meets the applicability criteria at the time construction
	commenced
EXIST	The EGU is not new or reconstructed

## **▼** Continue only if "Limited-use Liquid" is "No."

<u>Table 13b</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

# Start-Up:

Enter "YES" if start-up date of affected source was before April 16, 2012. Otherwise, enter "NO."

#### **Unit Fuel:**

Select one of the following options that describes the fuel type used. Enter the code on the form.

Code	Description
8300BTU	The EGU is designed for coal with a heating value greater than or equal to 8,300 Btu/lb
	(i.e. not low rank virgin coal)
LORANK	The EGU is designed for low rank virgin coal
IGCC	The unit is an IGCC combusting either gasified coal or gasified solid oil-derived fuel
LIQ-OIL	The unit is a continental liquid oil-fired EGU
SO-OIL	The EGU designed to burn solid oil-derived fuel

#### Pollutant-a:

Select one of the following options that describes the pollutant chosen to represent HAP metals. Enter the code on the form.

Description
Filterable PM is a surrogate for total HAP or total non-Hg HAP metals
Total HAP or total non-Hg HAP metals are used as the standard
Individual HAP or individual non-Hg HAP metals are used as alternative equivalent standard

# ★ Complete "Syngas" only if "Construction Status" is "NEW" or "RECON," "Unit Fuel" is "IGCC;" and "Pollutant-a" is "PM."

#### **Syngas:**

Enter "YES" if the IGCC plant duct burner is syngas-fired. Otherwise, enter "NO."

# ★ Complete "PM-Input" only if "Construction Status" is "EXIST" and "Pollutant-a" is "PM."

#### **PM-Input:**

Enter "YES" if a heat input-based limit is used for PM. Otherwise, enter "NO."

**★** Complete "TOTHAP-Input" only if "Construction Status" is "EXIST" and "Pollutant-a" is "TOTHAP."

### **TOTHAP-Input:**

Enter "YES" if a heat input-based limit is used for total HAP. Otherwise, enter "NO."

# <u>Table 13c</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

# ★ Complete the heat input-based series below only if "Construction Status" is "EXIST" and "Pollutant-a" is "INDHAP."

# **Sb-Input:**

Enter "YES" if a heat input-based limit is used for antimony. Otherwise, enter "NO."

#### **As-Input:**

Enter "YES" if a heat input-based limit is used for arsenic. Otherwise, enter "NO."

#### Be-Input:

Enter "YES" if a heat input-based limit is used for beryllium. Otherwise, enter "NO."

## **Cd-Input:**

Enter "YES" if a heat input-based limit is used for cadmium. Otherwise, enter "NO."

#### **Cr-Input:**

Enter "YES" if a heat input-based limit is used for chromium. Otherwise, enter "NO."

### **Co-Input:**

Enter "YES" if a heat input-based limit is used for cobalt. Otherwise, enter "NO."

# <u>Table 13d</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

## **Pb-Input:**

Enter "YES" if a heat input-based limit is used for lead. Otherwise, enter "NO."

### **Mn-Input:**

Enter "YES" if a heat input-based limit is used for manganese. Otherwise, enter "NO."

### Ni-Input:

Enter "YES" if a heat input-based limit is used for nickel. Otherwise, enter "NO."

## **Se-Input:**

Enter "YES" if a heat input-based limit is used for selenium. Otherwise, enter "NO."

### **Hg-Input-a:**

Enter "YES" if a heat input-based limit is used for mercury. Otherwise, enter "NO." (Applicable only if "Unit Fuel" is "LIQ-OIL.")

**★** Complete "Pollutant-b" only if "Construction Status" is "NEW" or "RECON" and "Unit Fuel" is "8300BTU," "LORANK," IGCC" or "SO-OIL;" or if "Construction Status" is "EXIST" and "Unit Fuel" is "8300BTU," "LORANK" or "SO-OIL."

#### Pollutant-b:

Select one of the following options that describes the pollutant chosen to represent acid gas. Enter the code on the form.

Code	Description
HCL	Hydrogen chloride is a surrogate for acid gas HAP.
$SO_2$	Sulfur dioxide is a surrogate for acid gas HAP.

# <u>Table 13e</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

★ Complete "HCl-Input" only if "Construction Status" is "EXIST" and "Unit Fuel" is "IGCC" or "LIQ-OIL;" or if "Construction Status" is "EXIST" and "Pollutant-b" is "HCL."

### **HCl-Input**:

Enter "YES" if a heat input-based limit is used for hydrogen chloride. Otherwise, enter "NO."

★ Complete "SO<sub>2</sub>-Input" only if "Construction Status" is "EXIST" and "Pollutant-b" is "SO<sub>2</sub>."

# SO<sub>2</sub>-Input:

Enter "YES" if a heat input-based limit is used for sulfur dioxide. Otherwise, enter "NO."

★ Complete "Hg-Input-c" only if "Construction Status" is "EXIST" and "Unit Fuel" is other than "LIQ-OIL;" or if "Construction Status" is "EXIST" and "Unit Fuel" is "LIQ-OIL" and "Pollutant-a" is "INDHAP."

# **Hg-Input-c:**

Enter "YES" if a heat input-based limit is used for mercury. Otherwise, enter "NO."

**★** Complete "Hg LEE Test" only if "Construction Status" is "EXIST" and "Unit Fuel" is "8300BTU"

### **Hg LEE Test:**

Select one of the following options that describes the Hg LEE Testing period. Enter the code on the form.

Code	Description
30	LEE Testing is conducted for 30 days
90	LEE Testing is conducted for 90 days

★ Complete "HF-Input" only if "Construction Status" is "EXIST" and "Unit Fuel" is "LIQ-OIL."

## **HF-Input:**

Enter "YES" if a heat input-based limit is used for hydrogen fluoride. Otherwise, enter "NO."

★ Complete "Scrubber/Bypass" only if "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL."

## Scrubber/Bypass:

Enter "YES" if the EGU is equipped with an acid gas scrubber and has a main stack and bypass stack exhaust configuration. Otherwise, enter "NO."

- **★** Complete "PM-LEE" only for the following:
  - "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL;" "Pollutant-a" is "PM" and "Scrubber/Bypass" is "NO;" or
  - "Unit Fuel" is "LIO-OIL" and "Pollutant-a" is "PM."

#### PM-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for filterable PM. Otherwise, enter "NO."

# <u>Table 13f</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

## Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

# **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titley/ty\_fop\_guidance.html.

# **★** Complete "TOTHAP-LEE" only for the following:

- "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL;" "Pollutant-a" is "TOTHAP" and "Scrubber/Bypass" is "NO;" or
- "Unit Fuel" is "CONT-OIL" and "Pollutant-a" is "TOTHAP."

#### **TOTHAP-LEE:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for total non-Hg HAP metals or total HAP metals. Otherwise, enter "NO."

# **★** Complete LEE series below only for the following:

Fuel" is "CONT-OIL" and "Pollutant-a" is "INDHAP."

#### Sb-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for antimony. Otherwise, enter "NO."

#### As-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for arsenic. Otherwise, enter "NO."

#### Be-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for beryllium. Otherwise, enter "NO."

#### Cd-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for cadmium. Otherwise, enter "NO."

#### Cr-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for chromium. Otherwise, enter "NO."

# <u>Table 13g</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

#### Co-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for cobalt. Otherwise, enter "NO."

#### **Pb- LEE:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for lead. Otherwise, enter "NO."

#### Mn-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for manganese. Otherwise, enter "NO."

#### Ni-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for nickel. Otherwise, enter "NO."

#### Se-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for selenium. Otherwise, enter "NO."

## **Hg-LEE-a:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for mercury. Otherwise, enter "NO." (Applicable only if "Construction Status" is "EXIST" and "Unit Fuel" is "LIQ-OIL.")

# <u>Table 13h</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

- **★** Complete "HCl-LEE" only for the following:
  - "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL;" "Pollutant-b" is "HCL" and "Scrubber/Bypass" is "NO;" or
  - "Unit Fuel" is "LIQ-OIL" and "Pollutant-b" is "HCL."

#### **HCI-LEE:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for hydrogen chloride. Otherwise, enter "NO."

- **★** Complete "SO<sub>2</sub>-LEE" only for the following:
  - "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL;" "Pollutant-b" is "SO<sub>2</sub>" and "Scrubber/Bypass" is "NO;" or
  - "Unit Fuel" is "LIQ-OIL" and "Pollutant-b" is "SO2."

## SO<sub>2</sub>-LEE:

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for hydrogen chloride. Otherwise, enter "NO."

★ Complete "Hg-LEE-c" only if "Unit Fuel" is "8300BTU," "LORANK," "IGCC" or "SO-OIL;" "Construction Status" is "EXIST";" and "Scrubber/Bypass" is "NO."

## **Hg-LEE-c:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for mercury. Otherwise, enter "NO."

★ Complete "HF-LEE" only if "Unit Fuel" is "LIQ-OIL" and "Construction Status" is "EXIST."

# **HF-LEE:**

Enter "YES" if the unit is qualifying as a low emitting EGU (LEE) for hydrogen fluoride. Otherwise, enter "NO."

- **▼** Continue only if:
  - "Construction Status" is "NEW" or "RECON;" or
  - "Construction Status" is "EXIST" and at least one of the "-LEE" attributes is "NO" (i.e. one or more of the following: PM-LEE, TOTHAP-LEE, Sb-LEE, As-LEE, Be-LEE, Cd-LEE, Cr-LEE, Co-LEE, Pb-LEE, Mn-LEE, Ni-LEE, Se-LEE, Hg-LEE-a, HCl-LEE, SO<sub>2</sub>-LEE, Hg-LEE-c and/or HF-LEE).

#### Startup:

Enter "YES" if relying on paragraph (2) definition of "startup" in §63.10042. Otherwise enter "NO."

# <u>Table 13i</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

## **Compliance Demo:**

Select one of the following options that describes how compliance is demonstrated. Enter the code on the form.

Code	Description
CPMS	A CPMS is used to demonstrate compliance
CEMS	A CEMS (or sorbent trap) is used to demonstrate compliance
NONE	None of the above

# **★** Do Not Complete "Stack Config" if "Compliance Demo" is "NONE."

### **Stack Config:**

Select one of the following options that describes the exhaust stack configuration. Enter the code on the form.

Code	Description
CONFIG-1	Single unit-single stack configuration
CONFIG-2	Unit utilizing common stack with other affected unit(s)
CONFIG-3	Unit(s) utilizing common stack with non-affected unit(s)
CONFIG-4	Unit with a main stack and a bypass stack
CONFIG-5	Unit with a common control device with multiple stack or duct configuration
CONFIG-6	Unit with multiple parallel control devices with multiple stacks

#### O<sub>2</sub>-CO<sub>2</sub> CEMS:

Enter "YES" if an oxygen or carbon dioxide CEMS is used to convert measured pollutant concentrations. Otherwise, enter "NO."

#### Flow Monitor:

Enter "YES" if a stack gas flow rate monitor is used for routine operation of a sorbent trap monitoring system or to convert measured pollutant concentrations. Otherwise, enter "NO."

#### **Gas Moisture:**

Enter "YES" if you are required to make corrections for stack gas moisture when converting pollutants. Otherwise, enter "NO."

#### **Direct HAP:**

Enter "YES" if you use a CEMS or sorbent trap to measure a HAP directly. Otherwise, enter "NO."

<u>Table 14a</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

#### **Commence:**

Select one of the following construction date options for the source. Enter the code on the form.

Code	Description
NEW	Source is new (commenced construction after June 4, 2010)
RECON	Source is reconstructed (commenced reconstruction after June 4, 2010)
EXIST	Source is existing (commenced construction or reconstruction on or before June 4, 2010)

### **Table Applicability:**

Select one of the following options that describes the applicability of emission limitations in §63.7500(a)(1)-Tables 1 or 2. Enter the code on the form.

Code	Description
SFF10	The unit burns coal/solid fossil fuel AND has heat input equal to or greater than 10 MMBtu/hr (subject to emission limits in Table 1 or 2)
BM10	The unit burns biomass/bio-based solid fuel AND has heat input equal to or greater than 10 MMBtu/hr (subject to emission limits in Table 1 or 2)
HLIQ10	The unit burns heavy liquid fuel AND has heat input equal to or greater than 10 MMBtu/hr (subject to emission limits in Table 1 or 2)
LLIQ10	The unit burns light liquid fuel AND has heat input equal to or greater than 10 MMBtu/hr (subject to emission limits in Table 1 or 2)
GAS210	The unit burns Gas 2 fuel AND has heat input equal to or greater than 10 MMBtu/hr (subject to emission limits in Table 1 or 2)
T3.1LTD	The unit qualifies as a limited use boiler or process heater as defined in §63.7575 (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.1)
T3.1TS	The unit is designed to utilize a continuous oxygen trim system (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.1)
T3.1G1	The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or less than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.1)
T3.1G2	The unit is designed to burn Gas 2 fuel AND has heat input equal to or less than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.1)
T3.1LL	The unit is designed to burn light liquid fuel AND has heat input equal to or less than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.1)

T3.2G1	The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input less than 10 MMBtu/hr but greater than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.2)
T3.2G2	The unit is designed to burn Gas 2 fuel AND has heat input less than 10 MMBtu/hr but greater than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.2)
T3.2LL	The unit is designed to burn light liquid fuel AND has heat input less than 10 MMBtu/hr but greater than 5 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.2)
T3.2HL	The unit is designed to burn heavy liquid fuel AND has heat input less than 10 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.2)
T3.2S	The unit is designed to burn solid fuel AND has heat input less 10 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.2)
T3.3G1	The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr (not subject to Table 1 or 2 emission limits but must comply with work practice standards in §63.7500(a)(1)-Table 3.3)

# ▼ Continue only if "Table Applicability" is "SFF10", "BM10", "HLIQ10", "LLIQ10", or "GAS210."

#### **HCl Emission:**

Select one of the following hydrogen chloride emission limit options. Enter the code on the form.

Code	Description
BTU-HCL	Emission limits for HCl in pounds per MMBtu heat input
STM-HCL	Emission limits for HCl in pounds per MMBtu steam output (for steam generating units only)
MWH-HCL	Emission limits for HCl in pounds per MWh power output (for boilers that generate
	electricity only)

## **HCI-CMS:**

Select one of the following hydrogen chloride continuous monitoring system (CMS) options. Enter the code on the form.

Code	Description
NONE	A CMS is not being used
HCL-CEMS	An HCl CEMS is used
SO2-CEMS	An SO <sub>2</sub> CEMS is used

<u>Table 14b</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

# **★** Complete this table only if "HCl-CMS" is "NONE."

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

#### **HCl-CD**:

Select one of the following hydrogen chloride control device options. Enter the code on the form.

Code	Description
DS	Dry scrubber is being used
WAS	A wet acid scrubber is used
PWS-PH	A particulate wet scrubber with pH effluent operating limit
OTHER	Other control methods are being used
NONE	A control device is not used

#### **HCl-Test:**

Select one of the following hydrogen chloride performance test options. Enter the code on the form.

Code	Description
PT	Compliance is demonstrated by conducting a performance test for HCl
NPT	A performance test is not being used

#### **HCl-FA:**

Select one of the following hydrogen chloride fuel analysis options. Enter the code on the form.

Code	Description
FA	Compliance is demonstrated by conducting fuel analysis for HCl
NFA	Fuel analysis is not being used

#### **HCl-FloMon:**

Select one of the following hydrogen chloride flow monitoring system options. Enter the code on the form.

Code	Description
FMS	Operating limit requires a flow monitoring system for HCl
NFMS	Flow monitoring system is not required for HCl

# **HCl-pHMon:**

Select one of the following hydrogen chloride pH monitoring system options. Enter the code on the form.

Code	Description
PHMON	Operating limit requires a pH monitoring system for HCl
NPH	A pH monitoring system is not required for HCl

# <u>Table 14c</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

# **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html.

## **Hg Emission:**

Select one of the following hydrogen chloride emission limit options. Enter the code on the form.

Code	Description
BTU-HG	Emission limits for Hg in pounds per MMBtu heat input
STM-HG	Emission limits for Hg in pounds per MMBtu steam output (for steam generating units only)
MWH-HG	Emission limits for Hg in pounds per MWh power output (for boilers that generate electricity
	only)

# **Hg-InjRate:**

Enter "YES" if an operating limit requires a monitoring system to measure sorbent injection rate for Hg. Otherwise, enter "NO."

### **Hg-CMS:**

Code

Select one of the following mercury continuous monitoring system (CMS) options. Enter the code on the form.

NONE	A CMS is not being used
<b>HG-CEMS</b>	An Hg CEMS is used
HGCMS	A CMS other than an Hg CEMS is used

# ▼ Continue on Table 14c only if "Hg-CMS" is "NONE". If "Hg-CMS" is HG-CEMS" or "HGCMS," skip to Table 14d.

## **Hg-CD:**

Select one of the following mercury control device options. Enter the code on the form.

**Description** 

Code	Description
DS	Dry scrubber is being used
WAS	A wet acid scrubber is used
ESP-WS	An electrostatic precipitator with a wet scrubber is used
ACI	Activated carbon injection is used
OTHER	Other control methods are being used
NONE	A control device is not used

## **Hg-Test:**

Select one of the following Hg performance test options. Enter the code on the form.

Code	Description
PT	Compliance is demonstrated by conducting a performance test for Hg
NPT	A performance test is not being used

# Hg-FA:

Select one of the following Hg fuel analysis options. Enter the code on the form.

Code	Description
HGFA	Compliance is demonstrated by conducting fuel analysis for Hg
NFA	Fuel analysis is not being used

# <u>Table 14d</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

#### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

**★** Complete "BM Subcategory" only if "Table Applicability" is "BM10."

## **BM Subcategory:**

Select one of the following options that describes subcategory of the boiler or process heater as listed in §63.7499. Enter the code on the form.

Code	Description
7499(I)	The unit is a stoker/sloped grate/other unit designed to burn wet biomass/bio-based solid
7499(D)	The unit is a stoker/sloped grate/other unit designed to burn kiln dried biomass/bio-based solid
7499(E)	The unit is a fluidized bed designed to burn biomass/bio-based solid
7499(F)	The unit is a suspension burner designed to burn biomass/bio-based solid
7499(J)	The unit is a Dutch oven/pile burner designed to burn biomass/bio-based solid
7499(G)	The unit is a fuel cell designed to burn biomass/bio-based solid
7499(H)	The unit is a hybrid suspension/grate burner designed to burn wet biomass/bio-based solid

#### **PM/TSM Emission:**

Select one of the following particulate matter or total selected metals emission limit options. Enter the code on the form.

Code	Description
BTU-PM	Emission limits for PM in pounds per MMBtu heat input
BTU-TSM	Emission limits for TSM in pounds per MMBtu heat input
STM-PM	Emission limits for PM in pounds per MMBtu steam output (for steam generating units only)
STM-TSM	Emission limits for TSM in pounds per MMBtu steam output (for steam generating units only)
MWH-PM	Emission limits for PM in pounds per MWh power output (for boilers that generate electricity
	only)
MWH-TSM	Emission limits for TSM in pounds per MWh power output (for boilers that generate electricity
	only)

▼ Continue on Table 14d only if "PM/TSM-Emission" is "BTU-TSM", "STM-TSM", or "MWH-TSM." If "PM/TSM Emission" is "BTU-PM," "STM-PM," or "MWH-PM," skip to Table 14e.

### **TSM-CMS:**

Select one of the following continuous monitoring system (CMS) options. Enter the code on the form.

Code	Description
<b>TSMCEMS</b>	TSM CEMS is used
<b>TSMCMS</b>	TSM CMS other than a TSM CEMS is used
NONE	CMS is not being used

# ▼ Continue on Table 14d only if "TSM-CMS" is "NONE". If "TSM-CMS" is "TSMCEMS" or "TSMCMS," skip to Table 14e.

#### **TSM-Test:**

Select one of the following TSM performance test options. Enter the code on the form.

**Code Description** 

PT Compliance is demonstrated by conducting a performance test for TSM

NPT A performance test is not being used

TSM-FA:

Select one of the following TSM fuel analysis options. Enter the code on the form.

**Code Description** 

FA Compliance is demonstrated by conducting fuel analysis for TSM

NFA Fuel analysis is not being used

<u>Table 14e</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

**★** Complete this table only if "PM/TSM Emission" is "BTU-PM," "STM-PM," or "MWH-PM."

### **Unit ID No.:**

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

# **★** Complete "PM-250" only if "Table Applicability" is "SFF10" or "HLL10"

### PM-250:

Select one of the following options for the average annual heat input. Enter the code on the form.

Code	Description
250+	Average annual heat input rate is greater than 250 MMBtu per hour from solid fossil fuel and/or
	heavy liquid fuel
250-	Average annual heat input rate is less than or equal to 250 MMBtu per hour from solid fossil fuel
	and/or heavy liquid fuel

#### **PM-CMS:**

Select one of the following continuous monitoring system (CMS) options. Enter the code on the form.

Code	Description
<b>PMCEMS</b>	PM CEMS is used
<b>PMCMS</b>	PM CMS other than a PM CEMS is used
<b>PMCPMS</b>	PM CPMS is used to monitor a PM control device
NONE	CMS is not being used. (not a valid entry if "PM-250" is "250+")

# **▼** Continue on Table 14e only if "PM-CMS" is "NONE" or "PMCMS". If "PM-CMS" is "PMCEMS" or "PMCPMS," skip to Table 14f.

#### PM-CD:

Select one of the following PM control device options. Enter the code on the form.

Code	Description
BLD	A Fabric Filter with a bag leak detection system is used
WS	A Wet Scrubber is used
ESP-WS	An Electrostatic Precipitator with a Wet Scrubber is used
OTHER	Other control methods are being used
NONE	A control device is not used

#### **PM-Test:**

Select one of the following PM performance test options. Enter the code on the form.

Code	Description
PT	Compliance is demonstrated by conducting a performance test for PM
NPT	A performance test is not being used

#### PM-FM:

Select one of the following flow monitoring options. Enter the code on the form.

Code	Description
FM	Operating limit requires the use of a flow monitoring system
NFM	A flow monitoring system is not required

#### **PM-PMON:**

Select one of the following pressure monitoring system options. Enter the code on the form.

Code	Description
PMON	Operating limit requires the use of a pressure monitoring system
NO	A pressure monitoring system is not required

# <u>Table 14f</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

**★** Complete this table only if "TSM-CMS" is "NONE" or "PM-CMS" is "PMCMS" or "NONE."

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

### **Opacity-CD:**

Select one of the following control device options. Enter the code on the form.

Code	Description
BLD	A fabric filter with a bag leak detection system is used
FF	A fabric filter without a bag leak detection system is used
ESP-WS	An electrostatic precipitator with a wet scrubber is used
ESP	An electrostatic precipitator without a wet scrubber is used
DRY	A dry control system is used
OTHER	Other control methods are being used
NONE	A control device is not used

# ▼ Continue on Table 14f only if "Opacity-CD" is "FF", "ESP", or "DRY." If "Opacity-CD" is "BLD," "ESP-WS," "OTHER," or "NONE," skip to Table 14g.

#### COMS:

Select one of the following continuous opacity monitoring options. Enter the code on the form.

Code	Description
COMS	A continuous opacity monitoring system is used
NOCOMS	A continuous opacity monitoring system is not used

# **▼** Continue on Table 14f only if "COMS" is "NOCOMS." If "COMS" is "COMS," skip to Table 14g.

#### **OPT-Test:**

Select one of the following opacity performance test options. Enter the code on the form.

Code	Description
OPT	Compliance is demonstrated by conducting a performance test for opacity
NPTO	A performance test is not being used

# <u>Table 14g</u>: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP/GOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

**★** Complete "SFF Subcategory" only if "Table Applicability" is "SFF10."

### **SFF Subcategory:**

Select one of the following options that describes subcategory of the boiler or process heater as listed in §63.7499. Enter the code on the form.

Code	Description
7499(A)	The unit is a pulverized coal/solid fossil fuel unit
7499(B)	The unit is a stoker designed to burn coal/solid fossil fuel
7499(C)	The unit is a fluidized bed unit designed to burn coal/solid fossil fuel (without integrated heat
	exchanger)
7499(S)	The unit is a fluidized bed unit with an integrated fluidized bed heat exchanger designed to burn
	coal/solid fossil fuel
SUBNA	The unit is not part of the subcategories in §63.7499(a), (b), (c) or (s)

### **CO** Emission:

Select one of the following CO emission limit options. Enter the code on the form.

Code	Description
PPM-CO	Emission limits for CO in ppm by volume not using a CEMS (valid code only if "Table
	Applicability" is "SFF10" or if "BM Subcategory" is "7499(I)", "7499(E)", "7499(F)", "7499(J)" or "7944(H)"
CEM-CO	Emission limits for CO in ppm by volume using a CEMS (valid code only if "Table
	Applicability" is "SFF10" or if "BM Subcategory" is "7499(I)", "7499(E), "7499(F)", "7499(J)", or "7944(H)"
PPM	Emission limits for CO in ppm by volume (valid code only if "Table Applicability" is "HLIQ10"
	or "LLIQ10", or "GAS2" or "BM Subcategory" is "7499(D)", or "7499(G)"
STM-CO	Emission limits for CO in pounds per MMBtu steam output (for steam generating units only).
MWH-CO	Emission limits for CO in pounds per MWh power output (for boilers that generate electricity
	only)

# **▼** Continue only if "CO Emission" is "PPM-CO," "STM-CO," or "MWH-CO."

# **CO-CMS**:

Select one of the following continuous monitoring system (CMS) options. Enter the code on the form.

Code	Description
COCMS	CO CMS is used
NONE	CMS is not being used

#### **CO-Test:**

Select one of the following CO performance test options. Enter the code on the form.

Code	Description
PT	Compliance is demonstrated by conducting a performance test for CO
NPT	A performance test is not being used

<u>Table 15a</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart TTTT: Standards of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units

- **★** Do not complete this table for steam generating units or integrated gasification combined cycle (IGCC) facilities that have been constructed after January 8, 2014, or have been modified or reconstructed after June 18, 2014, that do not meet the applicability criteria listed in 40 CFR §60.5509(a)(1)-(2).
- **★** Do not complete this table for steam generating units or IGCC facilities that meet any of the conditions specified in 40 CFR §60.5509(b)(1)-(10).

# Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

#### **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/ty fop guidance.html.

# **Unit Type:**

Select one of the following unit type options. Enter the code on the form.

Code Description
STEAM Steam generating unit
LGCC Integrated gasification combined evolu-

IGCC Integrated gasification combined cycle facility

#### **Construction/Modification Date:**

Select one of the following options describing the date of commencement of the most recent construction, modification, or reconstruction. Enter the code on the form.

Code	Description
2014-	Constructed on or before January 8, 2014
2014+	Constructed after January 8, 2014
2014-M	Modified on or before June 18, 2014
2014+M	Modified after June 18, 2014
2014-R	Reconstructed on or before June 18, 2014
2014+R	Reconstructed after June 18, 2014

- **▼** Do not continue if "Construction/Modification Date" is "2014-", "2014-M", or "2014-R."
- **★** Do not complete "Base Load Rating" if Unit Type is "STEAM" or "IGCC" and Construction/Modification Date is "2014+."

#### **Base Load Rating:**

Select one of the following options describing the Base Load Rating. Enter the code on the form.

Code	Description
2100-	The unit has a base load rating of 2,100 GJ/h (2,000 MMBtu/h) or less
2100+	The unit has a base load rating greater than 2,100 GJ/h (2,000 MMBtu/h)

# **Commercial Operation Date:**

Select one of the following options describing the date of commencement of commercial operation. Enter the code on the form.

Code	Description
2015-	The unit commenced commercial operation before October 23, 2015
2015+	The unit commenced commercial operation on or after October 23, 2015

# **★** Complete "Emissions Reporting Date" only if "Commercial Operation Date" is "2015-."

## **Emissions Reporting Date:**

Select one of the following options describing when emissions reporting is required to begin. Enter the code on the form.

Code	Description
OCT2015-	The date on which emissions reporting was required to begin passed prior to October 23, 2015
OCT2015+	The date on which emissions reporting was required to begin was after October 23, 2015

## **Acid Rain Program:**

Select one of the following options describing Acid Rain Program applicability. Enter the code on the form.

Code	Description
ARP	The unit is subject to the Acid Rain Program
NARP	The unit is not subject to the Acid Rain Program

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<u>Table 15b</u>: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart TTTT: Standards of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units

#### Unit ID No.:

Enter the identification number (ID No.) for the unit (maximum 10 characters) as listed on Form OP SUM (Individual Unit Summary).

## **SOP Index No.:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

# CO<sub>2</sub> Capture:

Select one of the following options describing if the affected EGU captures CO<sub>2</sub>. Enter the code on the form.

Code	Description
CAP	The EGU captures CO <sub>2</sub> to meet the applicable CO <sub>2</sub> emission limit
NOCAP	The EGU does not capture CO <sub>2</sub> to meet the applicable CO <sub>2</sub> emission limit

# **★** Complete "CO<sub>2</sub> Transfer" only if "CO<sub>2</sub> Capture" is "CAP."

## CO<sub>2</sub> Transfer:

Select one of the following options describing if captured CO<sub>2</sub> is transferred. Enter the code on the form.

Code	Description
TRAN	The administrator has granted approval for the captured CO <sub>2</sub> from the affected EGU to be
	transferred to a facility reporting under 40 CFR Part 98, Subpart RR
NOTRAN	CO2 captured from the affected EGU is not transferred

# **Monitoring:**

Select one of the following options describing emissions monitoring. Enter the code on the form.

Code	Description
CEMS	The affected EGU uses CO <sub>2</sub> Continuous Emissions Monitoring (CEMS)
NOCEMS	The affected EGU does not use CO <sub>2</sub> Continuous Emissions Monitoring (CEMS)

## **★** Complete "Common Stack" only if "Monitoring" is "CEMS."

#### Common Stack:

Select one of the following options describing if the EGUs share a common stack. Enter the code on the form.

Code	Description
C-STK	Two or more affected EGUs share a common exhaust stack, are subject to the same emissions
	standard, and are choosing to monitor emissions at the common stack
I-STK	Each affected EGU emits exhaust gases through individual stacks

# **★** Complete "Multiple Stacks" only if "Monitoring" is "CEMS."

#### **Multiple Stacks:**

Select one of the following describing if multiple stacks are used for exhaust gases. Enter the code on the form.

Code	Description
M-STK	The exhaust gases from the affected EGU are emitted to the atmosphere through multiple stacks,
	or the exhaust gases are routed to a common stack through multiple ducts and are electing to
	monitor in the ducts
S-STK	The exhaust gases are emitted through a single stack

# **Common Electric Generator:**

Select one of the following options describing if a common electric generator is used. Enter the code on the form.

Code	Description
C-GEN	Two or more affected EGUs serve a common electric generator
I-GEN	Two or more affected EGUs have individual electric generators

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 1)

# **Federal Operating Permit Program**

Table 1a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Construction/ Modification Date	Covered Under Subpart Da or KKKK	Changes to Existing Affected Facility	Heat Input Rate	Alternate 42C	PM CEMS	Opacity Monitoring	Gas/Liquid Fuel	Fuels with 0.33 % or Less Sulfur	Specific Site

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 2)

# **Federal Operating Permit Program**

Table 1b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	D-Series Fuel Type	D-Series Fuel Type	D-Series Fuel Type	Alternate 43D	Alternate 44F	Flue Gas Desulfurization	SO <sub>2</sub> Monitoring	Cyclone- Fired Unit	NOx Monitoring Type

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 3)

# **Federal Operating Permit Program**

Table 2a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Da: Standards of Performance for Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Construction/ Modification Date	Heat Input of Fossil Fuel	D-Series Fuel Type	D-Series Fuel Type	D-Series Fuel Type	Changes to Existing Affected Facility	Percent (%) Coal Refuse	Combined Cycle Type	PM Commercial Demonstration Permit	PM Standard Basis

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 4)

#### **Federal Operating Permit Program**

Table 2b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Da: Standards of Performance for Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	NOx IGCC Standard	MACT Applicability	Unit Type	PM Monitoring Type	Opacity Monitoring Type	SO <sub>2</sub> Monitoring Type	NOx Monitoring Type	SO <sub>2</sub> Commercial Demonstration Permit	SO <sub>2</sub> Emission Rate	FGD

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 5)

# **Federal Operating Permit Program**

Table 2c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Da: Standards of Performance for Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	SO <sub>2</sub> Standard Basis	NOx Comm. Dem. Permit	Alt. Stds. for Comb. NOx and CO	NO <sub>x</sub> Standard Basis	Duct Burner	PM Flow Monitoring System	SO <sub>2</sub> Flow Monitoring System	NO <sub>x</sub> Flow Monitoring System

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 6)

# **Federal Operating Permit Program**

# Table 3a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Db: Standards of Performance for Industrial-Commercial Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Construction/Modification Date	Heat Input Capacity	Subpart Da	Changes to Existing Affected Facility	Subpart Ea, Eb, or AAAA	Subpart KKKK	Subpart Cb or BBBB

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 7)

#### **Federal Operating Permit Program**

Table 3b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Db: Standards of Performance for Industrial-Commercial Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	D-Series Fuel Type	D-Series Fuel Type	D-Series Fuel Type	Subpart D	Subpart J	Subpart E	ACF Option SO <sub>2</sub>	ACF Option PM	ACF Option NO <sub>X</sub>

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 8)

# **Federal Operating Permit Program**

# Table 3c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Db: Standards of Performance for Industrial-Commercial Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	60.42b (k)(2) Low Sulfur Exemption	60.42b (k)(4) Alternative	Post- Combustion Control	60.43b(h)(2) Alternative	Electrical or Mechanical Output	Output Based Limit	Steam with Electricity	Electricity Only	60.49 Da(n) Alternative	60.49 Da(m) Alternative

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 9)

#### **Federal Operating Permit Program**

Table 3d: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Db: Standards of Performance for Industrial-Commercial Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Residual Oil Sampling	Monitoring Type PM	Monitoring Type Opacity	Monitoring Type NOx	Monitoring Type SO <sub>2</sub>	Technology Type	Unit Type	Heat Release Rate	Heat Input Gas/Oil	Heat Input Wood	Fuel Heat Input

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 10)

# **Federal Operating Permit Program**

# Table 3e: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Db: Standards of Performance for Industrial-Commercial Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Alternate Emission Limit (AEL)	AEL ID. NO.	Facility Type	Monitoring Device	Common Fuel Source

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 11)

# **Federal Operating Permit Program**

# Table 4a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Dc: Standards of Performance for Industrial-Commercial Steam Generating Units Texas Commission on Environmental Quality

	Da	ate			Perm	it No.			Regulated	Entity No.	
Unit ID No.	SOP Index No.	Construction/ Modification Date	Maximum Design Heat Input Capacity	Applicability	Heat Input Capacity	D-Series Fuel Type	D-Series Fuel Type	D-Series Fuel Type	ACF Option SO <sub>2</sub>	ACF Option PM	30% Coal Duct Burner
				_							

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 12)

# **Federal Operating Permit Program**

# Table 4b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Dc: Standards of Performance for Industrial-Commercial Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Monitoring Type PM	Monitoring Type SO <sub>2</sub> Inlet	Monitoring Type SO <sub>2</sub> Outlet	Technology Type	43CE-Option	47C-Option

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 13)

# **Federal Operating Permit Program**

Table 5a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)
Subpart B: Combustion Control at Major Industrial, Commercial and
Institutional Sources in Ozone Nonattainment Areas
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Unit Type	MRC	RACT Date Placed in Service	Functionally Identical Replacement	Fuel Type	Fuel Type	Fuel Type	Annual Heat Input

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 14)

# **Federal Operating Permit Program**

Table 5b: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)
Subpart B: Combustion Control at Major Industrial, Commercial and
Institutional Sources in Ozone Nonattainment Areas
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	NO <sub>X</sub> Emission Limitation	Opt-In Unit	23C-Option	Title 30 TAC Chapter 116 Permit Limit	EGF System Cap Unit	NO <sub>X</sub> Emission Limit Average	NO <sub>x</sub> Reduction	Common Stack Combined

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 15)

#### **Federal Operating Permit Program**

Table 5c: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)
Subpart B: Combustion Control at Major Industrial, Commercial and
Institutional Sources in Ozone Nonattainment Areas
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Fuel Type Heat Input	NO <sub>X</sub> Monitoring System	Fuel Flow Monitoring	CO Emission Limitation	CO Monitoring System	NH <sub>3</sub> Emission Limitation	NH <sub>3</sub> Emission Monitoring

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 16)

# **Federal Operating Permit Program**

Table 6a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)

#### Subpart C: Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment Areas

**Texas Commission on Environmental Quality** 

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Date Placed in Service	Functionally Identical Replacement	Annual Heat Input	Service Type	Fuel Type	Fuel Type	Fuel Type	RACT NOx Emission Limitation	ESAD NOx Emission Limitation	EGF

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 17)

# **Federal Operating Permit Program**

Table 6b: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)

#### Subpart C: Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment Areas

**Texas Commission on Environmental Quality** 

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Fuel Firing Option	ESAD NO <sub>x</sub> DFW 8-Hour	NO <sub>x</sub> Monitoring System	Title 30 TAC Chapter 116 Permit Limit	CO Emission Limitation	CO Monitoring System	Ammonia Use	NH <sub>3</sub> Emission Limitation	NH <sub>3</sub> Monitoring System

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 18)

# **Federal Operating Permit Program**

Table 7: Title 30 Texas Administrative Code Chapter 112 (30 TAC Chapter 112)

Control of Air Pollution from Sulfur Compounds

Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Fuel Type	Date of Operation	Heat Input	<b>Control Equipment</b>	FCAA § 412(c)	Stack Height

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 19)

# **Federal Operating Permit Program**

Table 8a: Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113)
Subchapter D: Hospital/Medical/Infections Waste Incinerators
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Construction Date	Combustor Type	Type of Waste	Co-Fired Combustor	HMIWI Size	Control Device	PM CEMS	Opacity Monitoring	Approved Equivalent ID No.
										-

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 20)

# **Federal Operating Permit Program**

Table 8b: Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113)
Subchapter D: Hospital/Medical/Infections Waste Incinerators
Texas Commission on Environmental Quality

	Date			Permit No.		Regulated Entity No.			
				Approved				HCL Percentage	
Unit ID No.	SOP Index No.	Commercial Unit	CO Monitoring	Equivalent ID No.	Dioxins/ Furans CEMS	Toxic Equivalent Method	HCL CEMS	Reduction Method	

-					

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 21)

# **Federal Operating Permit Program**

Table 8c: Title 30 Texas Administrative Code Chapter 113 (30 TAC Chapter 113) Subchapter D: Hospital/Medical/Infections Waste Incinerators Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Pb % Reduction Method	Cd % Reduction Method	Hg CEMS	Hg % Reduction Method

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 22)

# **Federal Operating Permit Program**

Table 9a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117) Subchapter E: Division 1: Utility Electric Generation in East and Central Texas Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Date Placed in Service	Unit Exempt	Location	Capacity	30% of the Maximum	Firing Method

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 23)

# **Federal Operating Permit Program**

Table 9b: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117) Subchapter E: Division 1: Utility Electric Generation in East and Central Texas Texas Commission on Environmental Quality

	Date			Permit No.		Regulated Entity No.			
Unit ID No.	SOP Index No. NO <sub>x</sub> Emission Limitation		Fuel	NO <sub>x</sub> Monitoring	Maximum Emission Rate	Ammonia Use	NH <sub>3</sub> Emission Limitation	Ammonia Monitoring	

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 24)

# **Federal Operating Permit Program**

Table 10a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

**Subpart EEE: Hazardous Waste Combustors Texas Commission on Environmental Quality** 

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Type Fuel	<b>Existing Source</b>	Area Source	Elective Standards	Dioxin/Furan Standard	Heating Value	Hg Feedrate

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 25)

# **Federal Operating Permit Program**

Table 10b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

**Subpart EEE: Hazardous Waste Combustors Texas Commission on Environmental Quality** 

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	Alt Metals	Met Feedrate	CO/THC Standard	Baghouse	PM Detection	Dioxin-Listed	DRE Previous Test	Feed Zone

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 26)

# **Federal Operating Permit Program**

Table 11: Title 30 Texas Administrative Code Chapter 111 (TAC Chapter 111)
Subchapter A: Division 2: Incineration
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Hazardous Waste	Monitor

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 27)

# **Federal Operating Permit Program**

Table 12: Title 30 Texas Administrative Code Chapter 111 (TAC Chapter 111) Subchapter A: Division 5: Emission Limits on Nonagricultural Processes Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
Unit ID No.	SOP Index No.	Source Type

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 28)

# **Federal Operating Permit Program**

Table 13a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	§63.9983(a)	§63.9983(b)	§63.9983(c)	§63.9983(d)	Limited-use Liquid	Construction Status

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 29)

# **Federal Operating Permit Program**

Table 13b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Start-Up	Unit Fuel	Pollutant-a	Syngas	PM-Input	TOTHAP-Input

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 30)

# **Federal Operating Permit Program**

Table 13c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Sb-Input	As-Input	Be-Input	Cd-Input	Cr-Input	Co-Input

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 31)

# **Federal Operating Permit Program**

Table 13d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Pb-Input	Mn-Input	Ni-Input	Se-Input	Hg-Input-a	Pollutant-b

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 32)

# **Federal Operating Permit Program**

# Table 13e: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	HCl-Input	SO <sub>2</sub> -Input	Hg-Input-c	Hg-LEE Test	HF-Input	Scrubber/Bypass	PM-LEE

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 33)

# **Federal Operating Permit Program**

# Table 13f: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	TOTHAP-LEE	Sb-LEE	As-LEE	Be-LEE	Cd-LEE	Cr-LEE

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 34)

# **Federal Operating Permit Program**

Table 13g: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Co-LEE	Pb-LEE	Mn-LEE	Ni-LEE	Se-LEE	Hg-LEE-a

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 35)

# **Federal Operating Permit Program**

Table 13h: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	HCI-LEE	SO <sub>2</sub> -LEE	Hg-LEE-c	HF-LEE	Startup

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 36)

# **Federal Operating Permit Program**

Table 13i: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUUUU: Coal- and Oil-Fired Electric Utility Steam Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Compliance Demo	Stack Config	O2-CO2 CEMS	Flow Monitor	Gas Moisture	Direct HAP

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 37)

# **Federal Operating Permit Program**

Table 14a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date		Perm	it No.	Regulated Entity No.		
II MIN N	COD/CODI I N	G	75 11 4 19 1994	HCI F	HGI GMG	

Unit ID No.	SOP/GOP Index No.	Commence	Table Applicability	HCl Emission	HCl-CMS

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 38)

# **Federal Operating Permit Program**

Table 14b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.	

Unit ID No.	SOP/GOP Index No.	HCI-CD	HCl-Test	HCl-FA	HCl-FloMon	HCl-pHMon

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 39)

# **Federal Operating Permit Program**

Table 14c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Hg Emission	Hg-InjRate	Hg-CMS	Hg-CD	Hg-Test	Hg-FA

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 40)

# **Federal Operating Permit Program**

Table 14d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	BM Subcategory	PM/TSM Emission	TSM-CMS	TSM-Test	TSM-FA

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 41)

# **Federal Operating Permit Program**

Table 14e: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	PM-250	PM-CMS	PM-CD	PM-Test	PM-FM	PM-PMON

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 42)

# **Federal Operating Permit Program**

# Table 14f: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDDD: Industrial, Commercial, and Institutional Boilers

**Texas Commission on Environmental Quality** 

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Opacity-CD	COMS	OPT-Test

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 43)

# **Federal Operating Permit Program**

Table 14g: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart DDDD: Industrial, Commercial, and Institutional Boilers Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	SFF Subcategory	CO Emission	CO-CMS	CO-Test

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 44)

# **Federal Operating Permit Program**

# Table 15a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)

# Subpart TTTT: Standards of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP Index No.	Unit Type	Construction/Modification Date	Base Load Rating	Commercial Operation Date	Emissions Reporting Date	Acid Rain Program

# Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 45)

# **Federal Operating Permit Program**

# Table 15b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)

Subpart TTTT: Standards of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.		

Unit ID No.	SOP Index No.	CO <sub>2</sub> Capture	CO <sub>2</sub> Transfer	Monitoring	Common Stack	Multiple Stacks	Common Electric Generator