Form OP-UA2 - Instructions
Stationary Reciprocating Internal Combustion Engine Attributes
Texas Commission on Environmental Quality

General:

This form is used to provide a description and data pertaining to all stationary reciprocating internal combustion (SRIC) engines with potentially applicable requirements associated with a particular regulated entity number and application. 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 an SRIC engine, then it should be left blank and need not be submitted with the application. 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 corresponds 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:

Table 1a - 1c:	**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**
Table 2a - 2c:	**Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.**
Table 3:	**Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter E: Multi-Region Combustion Control**
Table 4a - 4b:	**Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**
Table 5a - 5c:	**Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

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.

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.

Please note that for general operating permit (GOP) applications, responses may be required for questions on this form which are not included as a column in the applicable GOP table. These responses may be needed to determine applicability of certain requirements within a single row of the GOP permit table.

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 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 www.tceq.texas.gov/permitting/central_registry/index.html.

Specific:

Table 1a: 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 this table for SRIC engines that meet the following criteria:**

- located at a site that is a major source of NOx, as defined in 30 TAC Chapter 117: and,
- located in the Houston/Galveston/Brazoria, Beaumont/Port Arthur, or Dallas/Fort Worth Eight-Hour Ozone Nonattainment Areas, or Bexar County Ozone Nonattainment Area; and
- located at a site that is not an electric power generating system owned or operated by an electric cooperative, municipality, river authority, public utility or a Public Utility Commission of Texas regulated utility; or,
- if located in Parker County, the site does not generate electric power for compensation

Unit ID No.:
Enter the identification number (ID No.) for the SRIC engines (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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

★ **Complete "Horsepower Rating" if located in the Beaumont/Port Arthur or Dallas/Fort Worth Eight-Hour or Bexar County Ozone Nonattainment Areas.**

Horsepower Rating:
Select one of the following options for the HP rating. Enter the code on the form.

For SRIC engines located in the Beaumont/Port Arthur Ozone Nonattainment Areas:

Code	Description
300-	HP is less than 300 (and unit is not a lean-burn gas-fired opt-in unit)
300+	HP is greater than or equal to 300
150+E2Y	Lean-burn, gas-fired SRIC with HP greater than or equal to 150 that is exempt from RACT requirements under 30 TAC § 117.103(b) but is included under either a Source Cap or an Alternative Plant-Wide Emission Specification in 30 TAC §§ 117.123(a) or 117.115(a) as an opt-in unit (for SOP applications only)

For SRIC engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area or Bexar County Ozone Nonattainment Area:

Code	Description
50-	HP is less than 50
50+	HP is greater or equal to than 50

▼ **Continue if application area is located in the Houston/Galveston/Brazoria or Dallas/Fort Worth Eight-Hour Ozone Nonattainment Areas; or if in the Beaumont/Port Arthur Ozone Nonattainment Areas and "Horsepower Rating" is "300+" or "150+E2Y"; or if in Bexar County Ozone Nonattainment Area and "Horsepower Rating" is "50+"**

★ **Complete "RACT Date Placed in Service" if located in the Beaumont/Port Arthur Ozone Nonattainment Area and "Horsepower Rating" is "300+." If "Horsepower Rating" is "150+E2Y," go to "Fuel Fired" and provide information from that point forward.**

RACT Date Placed in Service:
Select one of the following options for the date 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
FCD+	After June 9, 1993 and on or after the final compliance date specified in 30 TAC § 117.9000

★ **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:**

- **"Date Placed in Service" is "92-93" or "FCD+;" or**
- **"Date Placed in Service" is "93-FCD" and "Functionally Identical Replacement" is "NO."**

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

For SRIC engines located in the Beaumont/Port Arthur Ozone Nonattainment Areas:

Code	Description
EXEMPT	Used in research and testing, performance verification testing, solely to power other engines or turbines during startup, or directly and exclusively in agricultural operations
EMERG	Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC § 117.103(a)(6)(D)]
DIESEL	Any stationary diesel engine
850-	Demonstrated to operate less than 850 hours per year, based on a rolling 12-month average (low annual capacity factor) [claiming exemption 30 TAC § 117.103(b)(2)]
ENG	Any other SRIC engine

For SRIC engines located in the Houston/Galveston/Brazoria Ozone Nonattainment Area:

Code	Description
EXEMPT	Used in research and testing, performance verification testing, solely to power other engines or turbines during startup, or directly and exclusively in agricultural operations
EMERG	Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC§ 117.303(a)(6)(D)] (exemption is not available for new, modified, reconstructed, or relocated diesel fuel fired SRIC engines placed into service on or after October 1, 2001)
D2001-	Existing diesel fuel-fired engine placed into service before October 1, 2001, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed, or relocated on or after October 1, 2001 [claiming exemption 30 TAC § 117.303(a)(10)]
D2001+	New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, operated less than 100 hours/year, on a rolling 12-month average (other than emergency situations) that meets the corresponding emission standard for non-road engines listed in 40 CFR § 89.112(a), Table 1 (October 23, 1998) and in effect at the time of installation [claiming exemption 30 TAC § 117.303(a)(11)]
ENG	Any other SRIC engine

For SRIC engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area:

Code	Description
EXEMPT	Used in research and testing, performance verification testing, solely to power other engines or turbines during startup, or directly and exclusively in agricultural operations
EMERG	Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC § 117.403(a)(7)(D)] (exemption is not available for new, modified, reconstructed, or relocated diesel fuel fired SRIC engines placed into service on or after June 1, 2007)
W-EMER	Located in Wise County and used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC § 117.403(b)(2)(D)]
D2007-	Existing diesel fuel-fired engine placed into service before June 1, 2007, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed, or relocated on or after June 1, 2007 [claiming exemption 30 TAC § 117.403(a)(8)]
D2007+	Diesel fuel-fired engine, placed into service on or after June 1, 2007, operated less than 100 hours/year, on a rolling 12-month average (other than emergency situations) that meets the requirements for non-road engines [per 30 TAC § 117.403(a)(9)]
ENG	Any other SRIC engine

For SRIC engines located in the Bexar County Ozone Nonattainment Area:

Code	Description
EXEMPTB	The SRIC engine is used in research and testing, or performance verification and testing, or solely to power other gas turbines or engines during startup. [exemptions: §117.203(1)(A)-(C)]
EMERG	Used exclusively in emergency situations [§117.203(1)(D)]
ENG	Any other SRIC engine

▼ **Continue if "Type of Service" is "ENG," "W-EMER," or "EMERG."**

Fuel Fired:
Select one of the following options for the fuel fired by the engine. Enter the code on the form.

For GOP applications:

Code	Description
NG	Natural Gas (Engines authorized to operate under GOPs 511, 512, 513 and 514 must select this option except for black start engines, fire pump engines, emergency engines, and engines operated less than 100 hours per year, as allowed by the rule)
LFG	Landfill Gas
DIG	Digester Gas
ORG	Renewable, Non-fossil fuel gas other than landfill or digester gas
DSL	Petroleum-based diesel fuel
B100	Pure or "neat" biodiesel fuel
BXX	Blends of petroleum-based and biodiesel fuel
DUAL	Dual-fuel where at least one of the fuels is a fossil fuel
DUALN	Dual-fuel where both fuels are renewable non-fossil fuels

For SOP applications:

Code	Description
NG	Natural Gas
LFG	Landfill Gas
ORG	Renewable, Non-fossil fuel gas other than landfill gas
OFG	Fuel gas other than natural gas, landfill gas, and renewable, non-fossil fuel gas (propane, butane, refinery fuel gas, etc.)
DSL	Diesel fuel
B100	Pure or "neat" biodiesel fuel
BXX	Blends of petroleum-based and biodiesel fuel
DUAL	Dual-fuel where at least one of the fuels is a fossil fuel
DUALN	Dual-fuel where both fuels are renewable non-fossil fuels

▼ **Do not continue if in Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area and "Horsepower Rating" is "50-" and "Fuel Fired" is "NG," "LFG," "ORG" or "OFG."**

▼ **Do not continue if in Bexar County Ozone Nonattainment Area and "Fuel Fired" is "DSL", "B100", "BXX", "DUAL", or "DUALN."**

▼ **Continue only if "Type of Service" is "ENG;" or if "Horsepower Rating" is "150+E2Y", or if located in Bexar County Nonattainment Area and "Type of Service is "ENG" or "EMERG."**

Engine Type:
Select one of the following options for the engine type as defined in 30 TAC Chapter 117. Enter the code on the form.

Code	Description
LEANBURN	Lean-burn
RICHBURN	Rich-burn

▼ **Do not continue if in Bexar County Ozone Nonattainment Area and "Engine Type" is "RICHBURN" or if "Type of Service" is "EMERG."**

★ **If in Bexar County Ozone Nonattainment Area and "Engine Type" is "LEANBURN," skip to Table 1b.**

★ **Complete "ESAD Date Placed in Service" only for the following:**
- **GOP or SOP applications for sites located in the Houston/Galveston/Brazoria Ozone Nonattainment Area and "Fuel Fired" is NOT "NG," "LFG," "ORG" or "OFG;" or**
- **GOP or SOP applications for sites located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area and "Fuel Fired" is NOT "DUAL" or "DUALN."**

ESAD Date Placed in Service:
Select one of the following options for the date the engine was placed into service. Enter the code on the form.

For dual fuel engines located in the Houston/Galveston/Brazoria Ozone Nonattainment Area:

Code	Description
2001-	Placed into service on or prior to December 31, 2000
2001+	Placed into service after December 31, 2000

For diesel engines located in the Houston/Galveston Ozone Nonattainment Area, please select the code that defines the most recent date that the engine was installed, modified, reconstructed, or relocated:

Code	Description
-01	Placed into service before October 1, 2001 and has not been modified, reconstructed, or relocated on or after October 1, 2001
01-02	Installed, modified, reconstructed, or relocated on or after October 1, 2001 but before October 1, 2002
02-03	Installed, modified, reconstructed, or relocated on or after October 1, 2002 but before October 1, 2003
03-04	Installed, modified, reconstructed, or relocated on or after October 1, 2003 but before October 1, 2004
04-05	Installed, modified, reconstructed, or relocated on or after October 1, 2004 but before October 1, 2005
05-06	Installed, modified, reconstructed, or relocated on or after October 1, 2005 but before October 1, 2006
06-07	Installed, modified, reconstructed, or relocated on or after October 1, 2006 but before October 1, 2007
07+	Installed, modified, reconstructed, or relocated on or after October 1, 2007

For gas fired lean-burn engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area:

Code	Description
2007-	Placed into service prior to June 1, 2007, and not modified, reconstructed, or relocated on or after June 1, 2007
2007+	Placed into service, modified, reconstructed, or relocated on or after June 1, 2007
2015-	Placed into service prior to June 1, 2015, and not modified, reconstructed, or relocated on or after June 1, 2015
2015+	Placed into service, modified, reconstructed, or relocated on or after June 1, 2015

For diesel engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area, please select the code that defines the most recent date that the engine was installed, modified, reconstructed, or relocated.

Code	Description
3109-	Placed into service before March 1, 2009 and has not been modified, reconstructed, or relocated on or after March 1, 2009
3109+	Installed, modified, reconstructed, or relocated on or after March 1, 2009

★ Complete "Diesel HP Rating" only for sites located in the Dallas/Fort Worth Eight-Hour or Houston/Galveston/Brazoria Ozone Nonattainment Area and "Fuel Fired" is "DSL," "B100" or "BXX."

Diesel HP Rating:
Select one of the following options for the horsepower rating of the diesel engine. Enter the code on the form.

For diesel SRIC engines located in the Houston/Galveston/Brazoria Ozone Nonattainment Area:

Code	Description
11-	Horsepower rating is less than 11 HP
11-25	Horsepower rating is 11 HP or greater, but less than 25 HP
25-50	Horsepower rating is 25 HP or greater, but less than 50 HP
50-100	Horsepower rating is 50 HP or greater, but less than 100 HP
100-175	Horsepower rating is 100 HP or greater, but less than 175 HP
175-300	Horsepower rating is 175 HP or greater, but less than 300 HP
300-600	Horsepower rating is 300 HP or greater, but less than 600 HP
600-750	Horsepower rating is 600 HP or greater, but less than 750 HP
750+	Horsepower rating is 750 HP or greater

For diesel SRIC engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area:

Code	Description
50-	Horsepower rating is less than 50 HP
50-100	Horsepower rating is 50 HP or greater, but less than 100 HP
100-750	Horsepower rating is 100 HP or greater, but less than 750 HP
750+	Horsepower rating is 750 HP or greater

Table 1b: 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

★ **If in Bexar County Ozone Nonattainment Area skip to "NOx Reduction."**

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

SOP/GOP Index No.:
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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

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

For GOP applications:

Code	Description
105	Title 30 TAC §§ 117.105(a)(1), (a)(3), (d), or (e) [relating to Emission Specifications for Reasonably Available Control Technology] (use for SRIC engines in the Beaumont/Port Arthur Ozone Nonattainment Area) 410 A Title 30 TAC § 117.410(a) [relating to Emission Specifications for Eight-Hour Attainment Demonstration] (use for SRIC engines in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area)
410A	Title 30 TAC § 117.410(a)(4) [relating to Emission Specifications for Eight-Hour Attainment Demonstration] (use for SRIC engines in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area)
310D	Title 30 TAC § 117.310(d)(3) [relating to Emission Specifications for Attainment Demonstration] (use for SRIC engines in the Houston/Galveston/Brazoria Ozone Nonattainment Area)
405B	Title 30 TAC § 117.405(b)(2)(A) [relating to Emission Specifications for Reasonably Available Control Technology (RACT) gas-fired rich-burn engines used in Wise County]
WS4C	White Superior four-cycle lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(i)
C2C	Clark two-cycle lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(ii)
FM2C	Fairbanks Morse MEP two-cycle lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(iii)
WSE	All other lean-burn engines located in Wise County complying with Title 30 TAC § 117.405(b)(2)(B)(iv)

For SOP applications:

For SRIC engines located in the Beaumont/Port Arthur Ozone Nonattainment Areas:

Code	Description
105	Title 30 TAC §§ 117.105(a)(1), (a)(3), (d) or (e) [relating to Emissions Specifications for Reasonably Available Control Technology]
APES	Engine is complying with an Alternative Plant-Wide Emissions Specification under Title 30 TAC § 117.115(a)
ACSS	Engine is complying with an Alternative Case Specific Specification under Title 30 TAC § 117.125(a)
SC	Engine is complying with a Source Cap under Title 30 TAC § 117.123(a)

For SRIC engines located in the Houston/Galveston/Brazoria Ozone Nonattainment Area:

Code	Description
310D	Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9) [relating to mass emissions cap and trade in Chapter 101, Subchapter H, Division 3, and Emission Specifications for Attainment Demonstration]
ACF	Engine is complying with an annual capacity factor specification under Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(17)

For SRIC engines located in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area:

Code	Description
410A	Title 30 TAC § 117.410(a)(4) [relating to Emission Specifications for Eight-Hour Attainment Demonstration]
405B	Title 30 TAC § 117.405(b)(2)(A) [relating to Emission Specifications for Reasonably Available Control Technology (RACT) gas fired rich burn engines used in Wise County]
ACF	Engine is complying with an annual capacity factor specification under Title 30 TAC § 117.410(a)(14)
SC	Engine is complying with a Source Cap under Title 30 TAC § 117.423(a)
WS4C	White Superior four-cycle-lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(i)
C2C	Clark two-cycle-lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(ii)
FM2C	Fairbanks Morse MEP two-cycle-lean-burn engine is complying with Title 30 TAC § 117.405(b)(2)(B)(iii)
WSE	All other lean-burn engines located in Wise County complying with Title 30 TAC § 117.405(b)(2)(B)(iv)

★ **Complete "23C-Option" only if "NOx 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	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 Limit" only if "NOx Emission Limitation" is "105."**

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

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

Code	Description
93Y	NOx emission limit in 30 TAC § 117.105 is greater than the NOx emission limit in a 30 TAC Chapter 116 permit
93N	NOx emission limit in 30 TAC § 117.105 is not greater than the NOx 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 specified in 30 TAC §§ 117.9000 or 117.9020(1) as a 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 §§ 117.105 or is greater than the NOx emission limit in any 30 TAC Chapter 116 permit issued after June 9, 1993
95N	Emission limit in 30 TAC §§ 117.105 or is not greater than the NOx emission limit in any 30 TAC Chapter 116 permit issued after June 9, 1993

★ **Complete "EGF System Cap Unit" only if located in the Houston/Galveston/Brazoria Ozone Nonattainment Area.**

EGF System Cap Unit:
Enter "YES" if the engine 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_x Averaging Method:
Select one of the following options for the method used to comply with the applicable emission limitation. Enter the code on the form.

Code	Description
30D	Complying with the applicable emission limit using a 30-day rolling average
1HR	Complying with the applicable emission limits using a block one-hour average

NO_x Reduction:
Select one of the following NOx reduction options. Enter the code on the form.

Code	Description
WATER	Water or steam injection
NSCR	Nonselective catalytic reduction
POST1	Post combustion control technique with urea or ammonia injection
POST2	Post combustion control technique with chemical reagent other than urea or ammonia
POST3	Post combustion control technique with chemical reagent injection (Bexar County only)
OTHER	Other post combustion control method
NONE	No NOx reduction

NO_x Monitoring System:
Select the appropriate code to indicate the type of monitoring system used.

For units without a monitoring system:

Code	Description
MERT	Maximum emission rate testing in accordance with 30 TAC § 117.8000
SCR	Engine is equipped with a selective catalytic reduction system that meets the criteria in § 117.340(c)(2)(C)(i)-(vi), or § 117.440(c)(2)(B)(i)-(vi) (use only if "Fuel Fired" is "DSL")

For all other units:

Code	Description
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system
75ARC	CEMS used to comply with 40 CFR Part 75 (pertaining to acid rain) (for SOP applications only)
75ARP	PEMS used to comply with 40 CFR Part 75 (pertaining to acid rain) (for SOP applications only)

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

Table 1c: 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 SRIC engines (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP/GOP Index No.:
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]). 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 numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

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), 117.240(a)(1), 117.340(a) or 117.440(a)
X40A2-A	Unit operates with a NOx and diluents CEMS and monitors stack exhaust flow per 30 TAC §§ 117.140(a)(2)(A), 117.240(a)(2)(A), 117.340(a)(2)(A) or 117.440(a)(2)(A)
X40A2-B	Unit vents to a common stack with a NOx and diluents CEMS and uses a single totalizing fuel flow meter per 30 TAC §§ 117.140(a)(2)(B), 117.240(a)(2)(B), 117.340(a)(2)(B) or 117.440(a)(2)(B).
X40A2-C	The unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.340(a)(2)(C) or 117.440(a)(2)(C) [Houston/Galveston/Brazoria or Dallas/Fort Worth Eight-Hour Ozone Nonattainment Areas only]
X40A2-D	The unit is equipped with a continuous monitoring system that continuously monitors horsepower and hours of operation per 30 TAC §§ 117.140(a)(2)(D), 117.240(a)(2)(C), 117.340(a)(2)(D) or 117.440(a)(2)(D).

▼ **Do not continue if in Bexar County Ozone Nonattainment Area.**

★ **Complete "CO Emission Limitation" only for SOP applications.**

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

For SRIC engines located in the Beaumont/Port Arthur Ozone Nonattainment Areas:

Code	Description
105	Title 30 TAC § 117.105(d) or (e) [relating to Emissions Specifications for Reasonably Available Control Technology]
ACSS	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.125(a)

For SRIC engines located in the Houston/Galveston/Brazoria Ozone Nonattainment Area:

Code	Description
310C	Title 30 TAC § 117.310(c)(1) 400 ppmv option
310CG	Title 30 TAC § 117.310(c)(1) 3 g/HP-hr option
ACSS	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.325(a)

For SRIC engines 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 Eight-Hour Attainment Demonstration]
405D	Title 30 TAC § 117.405(d)(1) [relating to Emission Specifications for Eight-Hour Attainment Demonstration]
ACSS	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.425(a)

CO Averaging Method:
Select one of the following options for the method used to comply with the applicable emission limitation. Enter the code on the form.

Code	Description
30D	Complying with the applicable emission limit using a 30-day rolling average
1HR	Complying with the applicable emission limits using a block one-hour average

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 complying
PEMS	Predictive emissions monitoring system complying
OTHER	Other than CEMS or PEMS

★ **Complete "NH_3 Emission Limitation" only for SOP applications and only if "NOx Reduction" is "POST1."**

NH_3 Emission Limitation:
Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NH_3 emission specifications of 30 TAC Chapter 117. Select one of the following options. Enter the code on the form.

For SRIC engines located in the Beaumont/Port Arthur Ozone Nonattainment Areas:

Code	Description
105	Title 30 TAC §§ 117.105(g) [relating to Emissions Specifications for Reasonably Available Control Technology]
ACSS	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.125(a)

For SRIC engines 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	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.325(a)

For SRIC engines 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] (use for engines in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area
405D	Title 30 TAC § 117.405(d)(2) [relating to Emission Specifications for Attainment Demonstration] (use for engines in Wise County in the Dallas/Fort Worth Eight-Hour Ozone Nonattainment Area)
ACSS	Engine is complying with an Alternative Case Specific Specification under 30 TAC § 117.425(a)

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_3 Monitoring:
Select one of the following options to indicate how the unit is monitored for NH_3 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 2a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

★ **Complete this table for all stationary Reciprocating Internal Combustion Engines (RICE) in GOP and SOP applications that are not being tested at a stationary RICE test cell:**

Unit ID No.:
Enter the identification number (ID No.) for the stationary reciprocating internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

HAP Source:
Select one of the following options to describe the HAP source classification.

Code	Description
MAJOR	The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2
AREA	The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2

Brake HP:
Select one of the following options to indicate the brake horsepower (HP). Enter the code on the form.

Code	Description
100-	Stationary RICE with a brake HP less than 100 HP
100-250	Stationary RICE with a brake HP greater than or equal to 100 and less than 250 HP
250-300	Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP
300-500	Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP
500+	Stationary RICE with a brake HP greater than 500 HP
5000+	Stationary RICE with a brake HP of 5,000 HP or greater (use only for 4 stroke spark ignited richburn RICE)

Construction/Reconstruction Date:
Select one of the following options that describe the date of commencement of the most recent construction or reconstruction. Enter the code on the form.

Code	Description
02-	Commenced construction or reconstruction before December 19, 2002
02-06	Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006
06+	Commenced construction or reconstruction on or after June 12, 2006

★ **Complete "Nonindustrial Emergency Engine" only if "HAP Source" is "AREA" and "Construction/Reconstruction Date" is "02-" or "02-06."**

Nonindustrial Emergency Engine:
Enter "YES" if the Stationary RICE is defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Otherwise, enter "NO."

▼ **Do not continue if "HAP Source" is "AREA" and:**
- **"Construction/Reconstruction Date" is "06+;" or**
- **"Nonindustrial Emergency Engine" is "YES."**

Service Type:
Select one of the following options that describe the type of service the stationary RICE is used for. Enter the code on the form. Note: The provisions of 40 CFR §63.6640(f)(2)(ii) and (f)(2)(iii) for emergency engines have been vacated by the U.S. Court of Appeals for the District of Columbia Circuit.

Code	Description
FUEL	Combusts landfill or digester gas equivalent to 10 % or more of the gross heat input on an annual basis
LIM	Limited use
EMER-A	Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii)
EMER-B	Emergency use where the RICE operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii) (Use only for RICE located at an area source)
BLSTRT	Black Start Use (use only for existing RICE, less than 500 HP, located at a major source; or existing RICE located at an area source)
NORMAL	Normal Use

▼ **Do not continue if "HAP Source" is "MAJOR" and:**
- **"Brake HP" is "500+" and "Service Type" is "LIM" or "EMER-A;" or**
- **"Brake HP" is "500+" and "Construction/Reconstruction Date" is "02-," and "Service Type" is "FUEL;" or**
- **"Construction/Reconstruction Date" is "06+" and "Brake HP" is "100-," "100-250," "250-300," or "300-500" and "Service Type" is "FUEL," "LIM," or "EMER-A," or "EMER-B."**

Stationary Rice Type:
Select one of the following options that describe the type of stationary RICE that you own or operate. Enter the code on the form.

Code	Description
2SLB	2 stroke spark ignited lean burn engine
4SLB	4 stroke spark ignited lean burn engine
4SLBR	remote 4 stroke spark ignited lean burn engine (use only for existing non-emergency, non-black start 4SLB with a site rating greater than 500 HP, located at an area source, that is a remote stationary RICE as defined in 40 CFR § 63.6675)
4SRB	4 stroke spark ignited rich burn engine
4SRBR	remote 4 stroke spark ignited rich burn engine (use only for existing non-emergency, non-black start 4SRB with a site rating greater than 500 HP, located at an area source, that is a remote stationary RICE as defined in 40 CFR § 63.6675)
CI	Compression ignition engine (use only for CI engines not meeting § 63.6603(d) or § 63.6603(e))
TIER1/2	Existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source that is certified to the Tier 1 or Tier 2 emission standards electing to comply with the management practices as specified in 40 CFR § 63.6603(d)
TIER3	Existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards electing to comply with 40 CFR Part 60, Subpart IIII

▼ **Do not continue if "HAP Source" is "MAJOR" and "Construction/Reconstruction Date" is "06+" and "Service Type" is "NORMAL," and:**
- **"Brake HP" is "100-," "100-250," "250-300," or "300-500" and "Stationary RICE Type" is "2SLB," "4SRB," or "CI;" or**
- **"Brake HP" is "100-" or "100-250" and "Stationary RICE Type" is "4SLB."**

▼ **Do not continue if "HAP Source" is "MAJOR" and "Construction/Reconstruction Date" is "02-" and "Brake HP" is "500+" and "Stationary RICE Type" is "2SLB" or "4SLB."**

▼ **Do not continue if "HAP Source" is "MAJOR" and "Construction/Reconstruction Date" is "02-" or "02-06" and:**
- **"Service Type" is "BLSTRT," "EMER-A," or "EMER-B" and "Brake HP" is "100-," "100-250," "250-300," or "300-500;" or**
- **"Brake HP" is "100-" and "Service Type" is "LIM," "NORMAL," or "FUEL."**

▼ **Do not continue if "HAP Source" is "AREA" and:**
- **"Service Type" is "BLSTRT;" or**
- **"Service Type" is "LIM" or "NORMAL," and "Stationary RICE Type" is "CI," and "Brake HP" is "100-," "100-250," or "250-300;" or**
- **"Service Type" is "LIM" or "NORMAL," and "Stationary RICE Type" is "2SLB;" or**
- **"Service Type" is "LIM" or "NORMAL," and "Stationary RICE Type" is "4SRB" or "4SLB" and "Brake HP" is "100-," "100-250," "250-300," or "300-500;" or**
- **"Brake HP" is "500+," and "Service Type" is "LIM" or "NORMAL," and "Stationary RICE Type" is "4SLBR" or "4SRBR.;" or**
- **"Service Type" is "EMER-A," and "Stationary RICE Type" is "CI," and "Brake HP" is "100-," "100-250," "250-300," "300-500," or "500+;" or**

- **"Service Type" is "EMER-A" or "EMER-B," and "Stationary RICE Type" is "2SLB" or "4SLB" or "4SRB," and "Brake HP" is "100-," "100-250," "250-300," "300-500," or "500+;" or**
- **"Service Type" is "FUEL."**

▼ **Do not continue if "HAP Source" is "MAJOR" and Construction/Reconstruction Date" is "02-," 02-06," or "06+," and "Brake HP" is "500+," and "Stationary RICE Type" is "2SLB," "4SRB," or "4SLB," and "Service Type" is "EMER-B."**

★ **"HAP Source is "MAJOR" and Construction/Reconstruction Date" is "02-," 02-06," or "06+," and "Brake HP" is "500+," and "Stationary RICE Type" is "CI," and "Service Type" is "EMER-B," complete "Displacement" on Table 2b only. No further information is required.**

★ **HAP Source" is "AREA" and Construction/Reconstruction Date" is "02-" or "02-06," and "Brake HP" is "100-250" or "100-250" or "250-300" or "300-500" or "500+," and "Stationary RICE Type" is "CI," and "Service Type" is "EMER-B," complete "Displacement" on Table 2b only. No further information is required**.

Table 2b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary reciprocating internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

★ **Complete "Manufacture Date" only if "Stationary RICE Type" is "4SLB" and "Brake HP" is "250-300" or "300-500" and "Construction/Reconstruction Date" is "06+."**

Manufacture Date:
Enter "YES" if the stationary RICE was manufactured on or after January1, 2008. Otherwise, enter "NO."

▼ **Do not continue if "Manufacture Date" is "NO."**

★ **Complete "Operating Hours" only if "HAP Source" is "AREA" and "Stationary RICE Type" is "4SLB" or "4SRB," and "Brake HP" is "500+."**

Operating Hours:
Enter "YES" if the stationary RICE is operated less than 24 hours per calendar year. Otherwise, enter "NO."

▼ **Do not continue if "Operating Hours" is "YES."**

Different Schedule:
Enter "YES" if the Administrator has approved a different schedule for the submission of reports under 40 CFR § 63.10(a). Otherwise, enter "NO."

▼ **Do not continue if "HAP Source" is "MAJOR" and "Service Type" is "FUEL."**

Emission Limitation:
Select one of the following options for compliance with the emission limitations. Enter the code on the form.

Code	Description
76+	Reducing formaldehyde emission by 76% or greater (use for richburn, spark ignited engines)
76+THC	Complying with reducing formaldehyde emissions by 76% or greater by testing for THC instead of formaldehyde. Average reduction of THC emissions is 30% or greater. (use for non-emergency 4SRB RICE)
REDCO	Reducing carbon monoxide emissions from the stationary RICE
LIMCO	Limiting the concentration of carbon monoxide in the stationary RICE exhaust
CONC	Limiting formaldehyde concentration from the stationary RICE exhaust
REDTHC	Reducing THC emissions from the stationary RICE

▼ **Continue only for SOP applications.**

★ **Complete "Displacement" and "Crankcase" only if "Service Type" is "NORMAL" or "LIM," "Stationary RICE Type" is "CI," "Brake HP" is "300-500" or "500+" and "Construction/Reconstruction Date" is "02-" or "02-06."**

★ **Complete "Displacement" only if "Service Type" is "EMER-B," "Stationary RICE Type is "CI," "Brake HP" is "100-250," "250-300," "300-500" or "500+" and "Construction/Reconstruction Date" is "02-," "02-06" or "06+."**

Displacement:
Enter "YES" if the stationary CI RICE has a displacement of less than 30 liters per cylinder and uses diesel fuel. Otherwise, enter "NO."

Table 2c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary reciprocating internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Crankcase:
Enter "YES" if the stationary CI RICE is equipped with a closed crankcase ventilation system. Otherwise, enter "NO."

Performance Test:
Enter "YES" if a performance test has been previously conducted that meets the conditions in 40 CFR § 63.6610(d)(1)-(5) or § 63.6612(b)(1)-(4). Otherwise, enter "NO."

Control Technique:
Select one of the following options to indicate the type of control device used. Enter the code on the form.

For 4 strokes spark ignited rich burn engines (4 SRB):

Code	Description
NSCR	Non-selective catalytic reduction
OTHER1	Control technique other than non-selective catalytic reduction

For 2 strokes spark ignited lean burn engines (2 SLB), 4 strokes spark ignited lean burn engines (4 SLB), and compression ignition engines (CI):

Code	Description
OXCAT	Oxidation catalyst
OTHER2	Control technique other than an oxidation catalyst

★ **Complete "Operating Limits" only if "Control Technique" is "OTHER1" or "OTHER2."**

Operating Limits:
Enter "YES" if the Administrator has been petitioned to establish operating limitations during the initial performance test. Otherwise, enter "NO."

Monitoring System:
Select one of the following options to indicate the type of monitoring used. Enter the code on the form.

Code	Description
CEMS	Continuous emission monitoring system
CPMS	Continuous parameter monitoring system
OTHER	The owner or operator has chosen to use a monitoring system that is not a CEMS or CPMS.
SHUT1	The owner or operator has installed a system to shutdown the engine when the catalyst inlet temperature exceeds 1350°F (use only for existing non-emergency, non-remote 4SLB engines greater than 500 brake HP located at an area source)
SHUT2	The owner or operator has installed a system to shutdown the engine when the catalyst inlet temperature exceeds 1250°F (use only for existing non-emergency, non-remote 4SRB engines greater than 500 brake HP located at an area source)

Table 3: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter E: Multi-Region Combustion Control

★ **Complete Table 3 only for stationary, gas-fired reciprocating internal combustion engines.**

★ **Complete Table 3 only for facilities located in Anderson, Brazos, Burleson, Camp, Cass, Cherokee, Franklin, Freestone, Gregg, Grimes, Harrison, Henderson, Hill, Hopkins, Hunt, Lee, Leon, Limestone, Madison, Marion, Morris, Nacogdoches, Navarro, Panola, Rains, Robertson, Rusk, Shelby, Smith, Titus, Upshur, Van Zandt, and Wood Counties.**

Unit ID No.:
Enter the identification number (ID No.) for the stationary reciprocating internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Unit Type:
Select one of the following options that describes the unit type. Enter the code on the form.

Code	Description
240-	The engine has a maximum rated horsepower capacity less than 240 HP
RESEARCH	The engine is use for research and testing
PERFV	The engine is used for purposes of performance verification and testing
START	The engine is used solely to power other engines or gas turbines during startup
EMERG	The engine is operated exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 100 hours per year, based on a rolling 12-month average
DISASTER	The engine is used in response to and during the existence of any officially declared disaster or state of emergency
AG	The engine is used directly and exclusively by the owner or operator for agricultural operations necessary for the growing of crops or raising of fowl or animals
DIESEL	The engine is a diesel engine
DUAL	The engine is a dual-fuel engine
LEANBN	The engine is a gas-fired lean burn engine
NONE	The unit does not qualify for any exemptions under the rule

▼ **Continue only if "Unit Type" is "NONE."**

Horsepower Rating:
Select one of the following options to indicate the horsepower (HP). Enter the code on the form.

Code	Description
500-	Stationary gas-fired rich-burn RICE with a HP less than 500 HP
500+	Stationary gas-fired rich-burn RICE with a HP equal to or greater than 500 HP

★ **Complete "Landfill" only if "Horsepower Rating" is "500+."**

Landfill:
Enter "YES" if the gas-fired rich-burn engine is fired on landfill gas. Otherwise, enter "NO."

Control Operations:
Select one of the following options to indicate NOx operational control requirements. Enter the code on the form.

Code	Description
POST1	Post combustion control technique with urea or ammonia injection
POST2	Post combustion control technique with chemical reagent other than urea or ammonia
NSCR	The engine is controlled with nonselective catalytic reduction
NONE	The engine is not using any of the above control operations

NO_x and O_2 Monitoring:
Select one of the following options to indicate NOx and O_2 monitoring used. Enter the code on the form.

Code	Description
CEMSNOX	The engine is using a CEMS to monitor NOx emissions
PEMSNOX	The engine is using a PEMS to monitor NOx emissions.
CEMSBOTH	The engine is using a CEMS to monitor both NOx and O_2 emissions.
NONE	The engine is not using any of the above methods (unit is complying with § 117.3330(b)(3) monitoring).

Ammonia Use:
Enter "YES" if urea or ammonia injection is used to control NOx emissions. Otherwise, enter "NO."

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

NH_3 Emission Limitation:
Title 30 TAC Chapter 117 provides two methods to be in compliance with the applicable NH_3 limitation standards listed in 30 TAC Chapter 117, Subchapter E. Select one of the following options. Enter the code on the form.

Code	Description
3310	Title 30 TAC § 117.3310(e) [relating to Emission Specifications for Eight-Hour Attainment Demonstration]
ACSS	Unit is complying with an Alternative Case Specific Specification under 30 TAC § 117.3325

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.
MBAL	Mass balance
OXY	Oxidation of ammonia to nitric oxide (NO)
STUBE	Stain tube

Table 4a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary spark ignited internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Construction/Reconstruction/Modification Date:
Enter "YES" if you own or operate a stationary spark ignition (SI) internal combustion engine (ICE) that commenced construction, reconstruction, or modification after June 12, 2006.

▼ **Do not continue if "Construction/Reconstruction/Modification Date" is "NO."**

Test Cell:
Enter "YES" if the SI ICE is being tested at an engine test cell/stand. Otherwise, enter "NO."

▼ **Do not continue if "Test Cell" is "YES."**

Exemption:
Select one of the following codes if the SI ICE is exempt from the requirements of NSPS JJJJ as described in 40 CFR Part 1068, Subpart C or 40 CFR Parts 90 and 1048. *Owners and operator, as well as manufactures may be eligible to request an exemption for national security.*

Code	Description
EXEMPT	The SI ICE is exempt as described in 40 CFR Part 1068 Subpart C or 40 CFR Parts 90 and 1048, OR due to national security
NONE	The SI ICE is not exempt

▼ **Do not continue if "Exemption" is "EXEMPT."**

Temporary Replacement:
Enter "YES" if the SI ICE is acting as a temporary replacement and is located at a stationary source for less than 1 year and has been properly certified to the standards that would be applicable to such engines under the appropriate non-road engine provisions. Otherwise, enter "NO."

▼ **Do not continue if "Temporary Replacement" is "YES.**"

Horsepower:
Select one of the following options to indicate the maximum engine power in horsepower (HP). Enter the code on the form.

For SI ICE that are emergency use only:

Code	Description
25-E	Maximum engine power less than or equal to 25 HP
25-100E	Maximum engine power greater than 25 HP and less than or equal to 100 HP
100-130E	Maximum engine power greater than 100 HP and less than 130 HP
130-500E	Maximum engine power greater than or equal to 130 HP and less than 500 HP
500+E	Maximum engine power greater than or equal to 500 HP

For SI ICE that are non-emergency use only:

Code	Description
25-	Maximum engine power less than or equal to 25 HP
25-100	Maximum engine power greater than 25 HP and less than 100 HP
100-500	Maximum engine power greater than or equal to 100 HP and less than 500 HP
500-1350	Maximum engine power greater than or equal to 500 HP and less than 1350 HP
1350+	Maximum engine power greater than or equal to 1350 HP

Fuel:
Select one of the following options to indicate what fuel the SI ICE is using. Enter the code on the form.

Code	Description
GASO	SI ICE that uses gasoline
NATGAS	SI ICE that uses natural gas
RBLPG	SI ICE that is a rich-burn engine that uses liquefied petroleum gas (LPG)
LBLPG	SI ICE that is a lean-burn engine that uses liquefied petroleum gas (LPG)
LAND	SI ICE that is a landfill/digester gas engine
WELL	SI ICE that is a wellhead gas engine that cannot meet natural gas emission limits (use only for SOP applications and only if you are petitioning the EPA per § 60.4233(g); otherwise use "NATGAS")

★ **Complete "AEL No." only if "FUEL" is "WELL."**

AEL No.:
Enter the date of the Alternative Emission Limit approval letter from the EPA.

▼ **Do not continue if "Fuel" is "WELL."**

★ **Complete "Lean Burn" only if BOTH of the following conditions are met:**
- **"Fuel" is "NATGAS" or "LAND" or "LBLPG;" and**
- **"Horsepower" is "500-1350."**

Lean Burn:
Enter "YES" if the SI ICE is a lean-burn engine. Otherwise, enter "NO."

Commencing:
Select one of the following options to indicate the type of construction the SI ICE is commencing. Enter the code on the form.

Code	Description
CON	SI ICE was newly constructed after 06/12/2006
MOD	SI ICE was modified after 06/12/2006 (per §60.14)
RECON	SI ICE was reconstructed after 06/12/2006 (per §60.15)

Table 4b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary spark ignited internal combustion engine 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]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Manufacture Date:
Select one of the following options to indicate the date of manufacture of the SI ICE. Enter the code on the form. Please read each date and be careful in choosing the correct date code as each code is very specific to a certain type of SI ICE.

For SI ICE that is commencing ***New Construction Only***

For SI ICE that is less than or equal to 25 HP (emergency or non-emergency):

Code	Description
N25-0708-	Date of manufacture is prior to July 1, 2008 (use for any cc)
N25-1211-	Date of manufacture is on or after July 1, 2008 to December 31, 2011 (use only for SI ICE that is less than 225cc)
N25-0112+	Date of manufacture is on or after January 1, 2012 (use only for SI ICE that is less than 225cc)
N25-1210-	Date of manufacture is on or after July 1, 2008 to December 31, 2010 (use only for SI ICE that is greater than or equal to 225cc)
N25-0111+	Date of manufacture is on or after January 1, 2011 (use only for SI ICE that is greater than or equal to 225cc)

For SI ICE that is greater than 25 HP (non-emergency only):

Code	Description
N0708-	Date of manufacture is prior to July 1, 2008 (use only for SI ICE that is less than 500 HP)
N0708+	Date of manufacture is on or after July 1, 2008 (use only for SI ICE that is less than 100 HP)
N08-10	Date of manufacture is on or after July 1, 2008 to December 31, 2010 (use only for SI ICE that is greater than or equal to 100 HP and less than 500 HP)
N0111+	Date of manufacture is on or after January 1, 2011 (use only for SI ICE that is greater than or equal to 100 HP and less than 500 HP)
N0707-	Date of manufacture is prior to July 1, 2007 (use only for SI ICE that is greater than or equal to 500 HP; except lean-burn SI ICE greater than or equal to 500 HP and less than 1350 HP)
N0108-	Date of manufacture is prior to January 1, 2008 (use only if "Lean Burn" is "YES")
N07-0610-	Date of manufacture is on or after July 1, 2007 to June 30, 2010 (use only for SI ICE that is greater than or equal to 500 HP; except lean-burn SI ICE greater than or equal to 500 HP and less than 1350 HP; as stated in Table 1of 40 CFR 60 Subpart JJJJ)
N08-0610-	Date of manufacture is on or after January 1, 2008 to June 30, 2010 (use only if "Lean Burn" is "YES")
N0710+	Date of manufacture is on or after July 1, 2010 (use only for SI ICE that is greater than or equal to 500HP as stated in Table 1 of 40 CFR 60 Subpart JJJJ)
N08-	Date of manufacture is on or after July 1, 2007 to July 1, 2008 (use only if "Fuel" is "GASO" or "RBLPG" and SI ICE is greater than or equal to 500 HP) [as stated in § 60.4243(h)]
N08+	Date of manufacture is on or after July 1, 2008 (use only if "Fuel" is "GASO" or "RBLPG" and SI ICE is greater than or equal to 500 HP) [as stated in § 60.4243(h)]

For SI ICE that is greater than 25 HP (emergency only):

Code	Description
N0109-E	Date of manufacture is prior to January 1, 2009
N0109+E	Date of manufacture is on or after January 1, 2009 (use only for SI ICE that is greater than 25 HP and less than 130 HP)
N09-10E	Date of manufacture is on or after January 1, 2009 to December 31, 2010 (use only for SI ICE that is greater than or equal to 130 HP and less than 500 HP)
N0111+E	Date of manufacture is on or after January 1, 2011 (use only for SI ICE that is greater than or equal to 130 HP and less than 500 HP)
N09-610-E	Date of manufacture is on or after January 1, 2009 to June 30, 2010 (use only for SI ICE that is greater than or equal to 500 HP)
N0710+E	Date of manufacture is on or after July 1, 2010 (use only for SI ICE that is greater than or equal to 500HP)

For SI ICE that is commencing ***Modification or Reconstruction Only***

For SI ICE that is less than or equal to 25 HP (emergency or non-emergency):

Code	Description
R25-0112-	Date of manufacture of SI ICE is prior to January 1, 2012 (use only for SI ICE that is less than 225cc)
R25-0112+	Date of manufacture of SI ICE is on or after January 1, 2012 (use only for SI ICE that is less than 225cc)
R25-0111-	Date of manufacture of SI ICE is prior to January 1, 2011 (use only for SI ICE that is greater than or equal to 225cc)
R25-0111+	Date of manufacture of SI ICE is on or after January 1, 2011 (use only for SI ICE that is greater than or equal to 225cc)

For SI ICE that is greater than 25 HP (non-emergency only):

Code	Description
R0708-	Date of manufacture is prior to July 1, 2008 (use only for SI ICE that is less than 500 HP)
R0708+	Date of manufacture is on or after July 1, 2008 (use only for SI ICE that is less than 500 HP)
R0707-	Date of manufacture is prior to July 1, 2007 (use only for SI ICE that is greater than or equal to 500 HP; except lean-burn SI ICE greater than or equal to 500 HP and less than 1350 HP)
R0707+	Date of manufacture is on or after July 1, 2007 (use only for SI ICE that is greater than or equal to 500 HP; except lean-burn SI ICE greater than or equal to 500 HP and less than 1350 HP)
R0108-	Date of manufacture is prior to January 1, 2008 (use only if "Lean Burn" is "YES")
R0108+	Date of manufacture is on or after January 1, 2008 (use only if "Lean Burn" is "YES")

For SI ICE that is greater than 25 HP (emergency only):

Code	Description
R0708-E	Date of manufacture is prior to July 1, 2008 (use only for SI ICE that is less than 130 HP)
R0708+E	Date of manufacture is on or after July 1, 2008 (use only for SI ICE that is less than 130 HP)
R0109-E	Date of manufacture is prior to January 1, 2009(use only for SI ICE that is greater than or equal to 130 HP and less than 500 HP)
R09-10E	Date of manufacture is on or after January 1, 2009 to December 31, 2010 (use only for SI ICE that is greater than or equal to 130 HP and less than 500 HP)
R0111+E	Date of manufacture is on or after January 1, 2011 (use only for SI ICE that is greater than or equal to 130 HP and less than 500 HP)
R09-610-E	Date of manufacture is on or after January 1, 2009 to June 30, 2010 (use only for SI ICE that is greater than or equal to 500HP)
R0710+E	Date of manufacture is on or after July 1, 2010 (use only for SI ICE that is greater than or equal to 500HP)

▼ **Do not continue if "Manufacture Date" is "N25-0708-," "N0708-," "N0707-," "N0109-E," or "N0108-."**

★ **Complete "Displacement" only if "Horsepower" is "25-" or "25-E."**

Displacement:
Select one of the following options to indicate the engine displacement in cubic centimeters (cc). Enter the code on the form.

Code	Description
66-	Engine displacement is less than 66cc
66-100	Engine displacement is greater than or equal to 66cc and less than 100cc
100-225	Engine displacement is greater than or equal to 100cc and less than 225cc
225+	Engine displacement is greater than or equal to 225cc

★ **Complete "Certified" only if "Commencing" is "CON."**

Certified:
Enter "YES" if you purchased a certified SI ICE. Otherwise, enter "NO."

★ **Complete "Operation" only if "Certified" is "YES."**

Operation:
Enter "YES" if you are operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions. Otherwise, enter "NO."

★ **Complete "Certified Modification" only if "Commencing" is "MOD" or "RECON."**

Certified Modification:
Enter "YES" if you purchased, or otherwise own/operate, a modified/reconstructed SI ICE that is certified. Otherwise, enter "NO."

Service:
Select one of the following options to indicate what type of service the SI ICE is performing. Enter the code on the form.

Code	Description
EMERG	SI ICE is an emergency engine
NON	SI ICE is a non-emergency engine

★ **Complete "Severe Duty" only if either of the following conditions are met:**

- **"Fuel" is "GASO" or "RBLPG," and "Service" is "NON," and "Horsepower" is greater than 25 HP; or**
- **"Fuel" is not "GASO" or "RBLPG" and "Service" is "NON," and "Horsepower" is "25-100."**

Severe Duty:
Enter "YES" if the SI ICE is a severe-duty engine. Otherwise, enter "NO."

★ **Complete "Optional Compliance" only if "Horsepower" is "500-1350" or "1350+" and "Fuel" is "GASO" or "RBLPG" and "Manufacture Date" is "N08-."**

Optional Compliance:
Select one of the following options to indicate the optional compliance requirements you are choosing to perform.

Code	Description
PURCH	Choosing to purchase an engine certified according to 40 CFR Part 1048 and install and configure the engine according to manufacturer's specifications
RECORD	Choosing to keep records as indicated in § 60.4243(h)(1), (h)(2), or (h)(3)

Table 5a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary compression ignition internal combustion engine 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., 60IIII-XX]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Applicability Date:
Select one of the following options to indicate the construction, reconstruction, or modification date of the stationary compression ignition (CI) internal combustion engine (ICE). Enter the code on the form.

Code	Description
2005+	Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005
2005-	Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005

▼ **Do not continue if "Applicability Date" is "2005-."**

Exemptions:
Select one of the following options to indicate which exemption could apply to the CI ICE. Enter the code on the form.

Code	Description
TEST	The CI ICE is being tested at an engine test cell/stand
NATSEC	The CI ICE is exempt due to national security
TEMP	The CI ICE is acting as a temporary replacement and is located at a stationary source for less than 1 year and has been properly certified to the standards that would be applicable to such engines under the appropriate non-road engine provisions
NONE	The CI ICE is not eligible for any of these exemptions

▼ **Continue only if "Exemptions" is "NONE."**

Service:
Select one of the following options to indicate what type of service the CI ICE is performing. Enter the code on the form.

Code	Description
NON	CI ICE is a non-emergency engine
EMERG	CI ICE is an emergency engine
FIRE	CI ICE is a fire-pump engine (an emergency engine certified to National Fire Protection Association requirements)

Commencing:
Select one of the following options to indicate what type of construction occurred after 07/11/2005. Enter the code on the form.

Code	Description
CON	CI ICE was newly constructed after 07/11/2005
MOD	CI ICE was modified after 07/11/2005 (per §60.14)
RECON	CI ICE was reconstructed after 07/11/2005 (per §60.15)

★ **Complete "Manufacture Date" only if "Commencing" is "CON."**

Manufacture Date:
Select one of the following options to indicate when the CI ICE was manufactured. Enter the code on the form.

For CI ICE for which "Service" is "NON" or "EMERG":

Code	Description
0406-	Date of manufacture was on or prior to 04/01/2006
0406+	Date of manufacture was after 04/01/2006

For CI ICE for which "Service" is "FIRE":

Code	Description
0706-	Date of manufacture was on or prior to 07/01/2006
0706+	Date of manufacture was after 07/01/2006

▼ **Do not continue if "Manufacture Date" is "0406-" or "0706-."**

Table 5b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary compression ignition internal combustion engine 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., 60IIII-XX]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

Diesel:
Select one of the following codes to indicate fuel being used. Enter the code on the form.

Code	Description
DIESEL	Diesel fuel is used
AES	Alternative Emission Standard has been approved by the EPA Administrator

★ **Complete "AES No." only if "Diesel" is "AES."**

AES No.:
If an AES has been approved by the EPA administrator, enter the corresponding AES unique identifier for each unit (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AES approval letter in the table column. The unique identifier and/or the date of the approval letter are contained in the Compliance File under the appropriate regulated entity number. Otherwise, leave this column blank.

▼ **Do not continue if "Diesel" is "AES."**

Displacement:
Select one of the following options to indicate the displacement of the CI ICE (expressed in liters per cylinder). Enter the code on the form.

Code	Description
10-CS	Displacement is less than 10 liters per cylinder and is a constant-speed engine. (*Use only if "Service" is "NON" or "EMERG."*)
10-	Displacement is less than 10 liters per cylinder.
10-15	Displacement is greater than or equal to 10 and less than 15 liters per cylinder.
15-20	Displacement is greater than or equal to 15 and less than 20 liters per cylinder.
20-25	Displacement is greater than or equal to 20 and less than 25 liters per cylinder.
25-30	Displacement is greater than or equal to 25 and less than 30 liters per cylinder.
30+	Displacement is greater than or equal to 30 liters per cylinder.

★ **Complete "Generator Set" only if "Service" is "NON" and "Displacement" is "10-."**

Generator Set:
Enter "YES" if the CI ICE is a generator set engine. Otherwise, enter "NO."

★ **Do not complete "Model Year" if "Displacement" is "30+."**

Model Year:
Select one of the following options to indicate what model year the CI ICE was manufactured in. Enter the code on the form.

Code	Description
2007-	CI ICE was manufactured prior to model year 2007
2007	CI ICE was manufactured in model year 2007
2008	CI ICE was manufactured in model year 2008
2009	CI ICE was manufactured in model year 2009
2010	CI ICE was manufactured in model year 2010
2011	CI ICE was manufactured in model year 2011
2012	CI ICE was manufactured in model year 2012
2013	CI ICE was manufactured in model year 2013
2014	CI ICE was manufactured in model year 2014
2015	CI ICE was manufactured in model year 2015
2016	CI ICE was manufactured in model year 2016
2017+	CI ICE was manufactured in model year 2017 or later

★ **Complete "Install Date" only if "Displacement" is "30+."**

Install Date:
Select one of the following options to indicate what year the CI ICE was installed. Enter the code on the form.

Code	Description
2012-	The CI ICE was installed prior to 2012
2012+	The CI ICE was installed in 2012 or later (use only if "Service" is "EMERG" or "FIRE")
2012-2015	The CI ICE was installed in 2012 through 2015
2016+	The CI ICE was installed in 2016 or later

Table 5c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Unit ID No.:
Enter the identification number (ID No.) for the stationary compression ignition internal combustion engine 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., 60IIII-XX]). 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

★ **Do not complete "Kilowatts" if "Displacement" is "30+."**

Kilowatts:
Select one of the following options to indicate the power rating of the CI ICE expressed in Kilowatts (KW). Enter the code on the form.

For non-emergency and emergency (NOT fire pump) CI ICE manufactured prior to model year 2007:

Code	Description
8-	Power rating is less than 8 KW
8-19	Power rating is greater than or equal to 8 KW and less than 19 KW
19-37	Power rating is greater than or equal to 19 KW and less than 37 KW
37-75	Power rating is greater than or equal to 37 KW and less than 75 KW
75-130	Power rating is greater than or equal to 75 KW and less than 130 KW
130-2237	Power rating is greater than or equal to 130 KW and less than or equal to 2237 KW
2237+	Power rating is greater than or equal to 2237 KW

For non-emergency CI ICE manufactured in model year 2007 and later:

For CI ICE with a displacement less than 10 liters per cylinder:

Code	Description
N8-	Power rating is less than 8 KW
N8-19	Power rating is greater than or equal to 8 KW and less than 19 KW
N19-37	Power rating is greater than or equal to 19 KW and less than 37 KW
N37-56	Power rating is greater than or equal to 37 KW and less than 56 KW
N56-75	Power rating is greater than or equal to 56 KW and less than 75 KW
N75-130	Power rating is greater than or equal to 75 KW and less than 130 KW
N130-368	Power rating greater than or equal to 130 KW and less than or equal to 368 KW
N368-560	Power rating is greater than 368 KW and less than 560 KW
N560-900	Power rating greater than or equal to 560 KW and less than or equal to 900 KW
N900-2237	Power rating is greater than 900 KW and less than or equal to 2237 KW
N2237+	Power rating is greater than 2237 KW

For CI ICE with a displacement greater than or equal to 10 and less than 30 liters per cylinder:

Code	Description
N368-3300	Power rating is greater than 368 KW and less than 3300KW (use only if "Displacement" is "15-20" and "Model Year" is "2007" through "2013")
N3300+	Power rating is greater than or equal to 3300 KW (use only if "Displacement" is "15-20" and "Model Year" is "2007" through "2013")
N75-	Power rating is less than 75 KW
N75-368	Power rating is greater than or equal to 75 KW and less than or equal to 368 KW
N368-600	Power rating is greater than 368 KW and less than 600 KW
N600-1400	Power rating is greater than or equal to 600 KW and less than 1400 KW
N1400-2000	Power rating is greater than or equal to 1400 KW and less than 2000 KW
N2000-3700	Power rating is greater than or equal to 2000 KW and less than 3700 KW
N3700+	Power rating is greater than or equal to 3700 KW

For emergency (NOT fire pump) CI ICE manufactured in model year 2007 and later:

For CI ICE with a displacement less than 10 liters per cylinder:

Code	Description
E8-	Power rating is less than 8 KW
E8-19	Power rating is greater than or equal to 8 KW and less than 19 KW
E19-37	Power rating is greater than or equal to 19 KW and less than 37 KW
E37-75	Power rating is greater than or equal to 37 KW and less than 75 KW
E75-130	Power rating is greater than or equal to 75 KW and less than 130 KW
E130-368	Power rating greater than or equal to 130 KW and less than or equal to 368 KW
E368-560	Power rating greater than or equal to 368 KW and less than or equal to 560KW
E560-2237	Power rating is greater than 560 KW and less than or equal to 2237 KW
E2237+	Power rating is greater than 2237 KW

For CI ICE with a displacement greater than or equal to 10 and less than 15 liters per cylinder:

Code	Description
E75-	Power rating is less than 75 KW
E75-368	Power rating is greater than or equal to 75 KW and less than or equal to 368 KW
E368-600	Power rating is greater than 368 KW and less than 600 KW
E600-1400	Power rating is greater than or equal to 600 KW and less than 1400 KW
E1400-2000	Power rating is greater than or equal to 1400 KW and less than 2000 KW
E2000-3700	Power rating is greater than or equal to 2000 KW and less than 3700 KW
E3700+	Power rating is greater than or equal to 3700 KW

For CI ICE with a displacement greater than or equal to 15 and less than 20 liters per cylinder:

Code	Description
E368-3300	Power rating is greater than 368 KW and less than 3300 KW (use only if “Model Year” is 2013)
E75-	Power rating is less than 75 KW
E75-368	Power rating is greater than or equal to 75 KW and less than or equal to 368 KW
E368-600	Power rating is greater than 368 KW and less than 600 KW
E600-1400	Power rating is greater than or equal to 600 KW and less than 1400 KW
E1400-2000	Power rating is greater than or equal to 1400 KW and less than 2000 KW
E2000-3300	Power rating is greater than or equal to 2000 KW and less than 3300 KW
E3300+	Power rating is greater than or equal to 3300 KW

For CI ICE with a displacement greater than or equal to 20 and less than 30 liters per cylinder:

Code	Description
E75-	Power rating is less than 75 KW
E75-368	Power rating is greater than or equal to 75 KW and less than or equal to 368 KW
E368-600	Power rating is greater than 368 KW and less than 600 KW
E600-1400	Power rating is greater than or equal to 600 KW and less than 1400 KW
E1400-2000	Power rating is greater than or equal to 1400 KW and less than 2000 KW
E2000+	Power rating is greater than or equal to 2000 KW

For ALL fire pump CI ICE less than 30 liters per cylinder:

Code	Description
F8-	Power rating is less than 8 KW.
F8-19	Power rating is greater than or equal to 8 KW and less than 19 KW.
F19-37	Power rating is greater than or equal to 19 KW and less than 37 KW.
F37-75	Power rating is greater than or equal to 37 KW and less than 75 KW.
F75-130	Power rating is greater than or equal to 75 KW and less than 130 KW.
F130-368	Power rating is greater than or equal to 130 KW and less than or equal to 368 KW.
F368-450	Power rating is greater than 368 KW and less than 450 KW.
F450-560	Power rating is greater than or equal to 450 KW and less than or equal to 560 KW.
F560+	Power rating is greater than 560 KW.

★ **Complete "Filter" only if "Service" is "NON."**

Filter:
Enter "YES" if the CI ICE is equipped with a diesel particulate filter. Otherwise, enter "NO."

★ **Complete "AECD" only if "Service" is "NON" or "EMERG."**

AECD:
Enter "YES" if the CI ICE is equipped with auxiliary emission control devices (AECDs) pursuant to the requirements of 40 CFR 1039.665. Otherwise, enter "NO."

★ **Complete "Standards" only if "Service" is "EMERG" or "FIRE."**

Standards:
Enter "YES" if the emergency CI ICE meets the Tier 1, 2, 3, or 4 standards applicable to non-emergency engines (for the same KW and model year). Otherwise, enter "NO."

Compliance Option:
Select one of the following options to indicate how compliance is being demonstrated. Enter the code on the form.

Select one of the following two options only if "Commencing" is "MOD" or "RECON."

Code	Description
CERT	Engine certified to meet the emission standards in §60.4204(e) or §60.4205(f), as applicable
NONCERT	Engine not certified to meet the emission standards in §60.4204(e) or §60.4205(f), as applicable

Select one of the following five options only if "Commencing" is "CON" **and**

- "Service" is "NON" or "EMERG" and "Displacement" is NOT "30+" and "Model Year" is "2007-;" **or**
- "Service" is "FIRE;" **and**
  - "Kilowatts" is "F8-," "F8-19," "F19-37," or "F37-75" **and** "Model Year" is "2010" or prior; or
  - "Kilowatts" is "F75-130" **and** "Model Year" is "2009" or prior; or
  - "Kilowatts" is "F130-368," "F368-450," or "F450-560" **and** "Model Year" is "2008" or prior; or
  - "Kilowatts" is "F560+" **and** "Model Year" is "2007" or prior.

Code	Description
PURCH	Certified engine according to § 60.4211(b)(1)
SIMILAR	Records are kept on a similar engine according to § 60.4211(b)(2)
MDATA	Records are kept of manufacturer data according to § 60.4211(b)(3)
CDDATA	Records are kept of control device data according to § 60.4211(b)(4)
TEST	Performance test conducted according to § 60.4211(b)(5)

Select one of the following two options only if "Commencing" is "CON" **and**

- "Service" is "NON" or "EMERG" and "Displacement" is **not** "30+" and "Model Year" is ***not*** "2007-;" **or**
- "Service" is "FIRE;" **and**
  - "Kilowatts" is "F8-," "F8-19," "F19-37," or "F37-75" **and** "Model Year" is "2011" or later; or
  - "Kilowatts" is "F75-130" **and** "Model Year" is "2010" or later; or
  - "Kilowatts" is "F130-368," "F368-450," or "F450-560" **and** "Model Year" is "2009" or later; or
  - "Kilowatts" is "F560+" **and** "Model Year" is "2008" or later.

Code	Description
MANU YES	The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.
MANU NO	The CI ICE and control device IS NOT installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.

★ **Complete "PM Compliance" only if "Commencing" is "CON" and "Service" is "NON," and "Displacement" is "30+."**

PM Compliance:
Select one of the following options to indicate which Particulate Matter compliance option you are using. Enter the code on the form.

Code	Description
PM60	Particulate matter emissions are reduced by 60% or more
PM15	Particulate matter emissions are limited in the engine exhaust to 0.15 g/KW-hr

★ **Complete "Options" only if "Service" is "FIRE" and if one of the following conditions are met:**

- **"Kilowatts" is "F37-75" and "Model Year" is "2011," "2012," or "2013;" or**
- **"Kilowatts" is "F75-130" and "Model Year" is "2010," "2011," or "2012;" or**
- **"Kilowatts" is "F130-368" or "F368-450" and "Model Year" is "2009," "2010," or "2011"**

Options:
Select one of the following options to indicate the rated speed (in RPMs) and whether or not you are choosing to alternatively comply with the previous model year's emission limits as stated in 40 CFR 60, Subpart IIII-Table 4 (Footnotes 1-3). Enter the code on the form.

Code	Description
2650-	The CI ICE rated speed is less than 2650 RPMs (Not allowed to comply with the previous model year's emission limits).
2650+YES	The CI ICE rated speed is greater than 2650 RPMs and is complying with the previous model year's emission limits.
2650+NO	The CI ICE rated speed is greater than 2650 RPMs but is not complying with the previous model year's emission limits.

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 1)
Federal Operating Permit Program
Table 1a: 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
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Horsepower Rating	RACT Date Placed in Service	Functionally Identical Replacement	Type of Service	Fuel Fired	Engine Type	ESAD Date Placed in Service	Diesel HP Rating

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 2)
Federal Operating Permit Program
Table 1b: 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
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	NO_x Emission Limitation	23-C Option	30 TAC Chapter 116 Limit	EGF System CAP Unit	NO_x Averaging Method	NO_x Reduction	NO_x Monitoring System

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 3)
Federal Operating Permit Program
Table 1c: 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
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Fuel Flow Monitoring	CO Emission Limitation	CO Averaging Method	CO Monitoring System	NH_3 Emission Limitation	NH_3 Monitoring

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 4)
Federal Operating Permit Program
Table 2a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	HAP Source	Brake HP	Construction/ Reconstruction Date	Nonindustrial Emergency Engine	Service Type	Stationary RICE Type

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 5)
Federal Operating Permit Program
Table 2b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Manufacture Date	Operating Hours	Different Schedule	Emission Limitation	Displacement

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 6)
Federal Operating Permit Program
Table 2c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Crankcase	Performance Test	Control Technique	Operating Limits	Monitoring System

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 7)
Federal Operating Permit Program
Table 3: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)
Subchapter E: Multi-Region Combustion Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Unit Type	Horsepower Rating	Landfill	Control Operations	NO_x and O_2 Monitoring	Ammonia Use	NHR_3 Emission Limitation	Ammonia Monitoring

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 8)
Federal Operating Permit Program
Table 4a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Construction/ Reconstruction/ Modification Date	Test Cell	Exemption	Temp Replacement	Horsepower	Fuel	AEL No.	Lean Burn	Commencing

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 9)
Federal Operating Permit Program
Table 4b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Manufacture Date	Displacement	Certified	Operation	Certified Modification	Service	Severe Duty	Optional Compliance

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 10)
Federal Operating Permit Program
Table 5a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Applicability Date	Exemptions	Service	Commencing	Manufacture Date

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 11)
Federal Operating Permit Program
Table 5b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Diesel	AES No.	Displacement	Generator Set	Model Year	Install Date

Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 12)
Federal Operating Permit Program
Table 5c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.

Unit ID No.	SOP/GOP Index No.	Kilowatts	Filter	AECD	Standard	Compliance Option	PM Compliance	Options