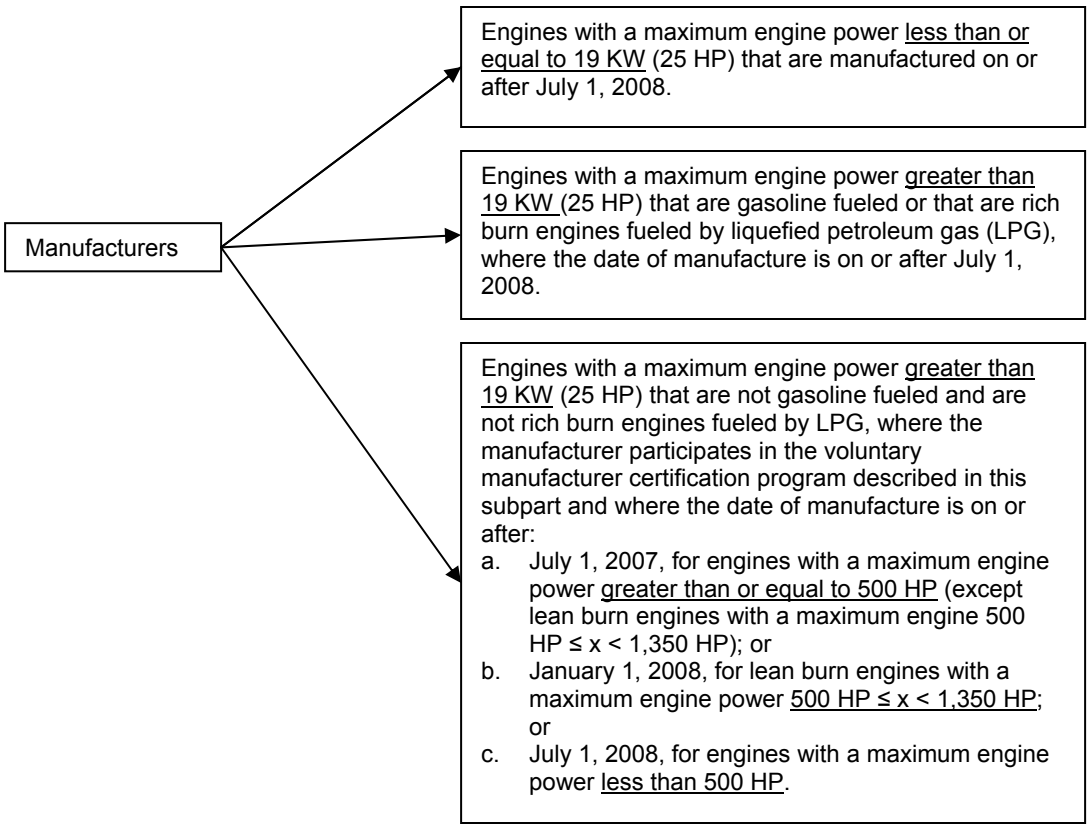
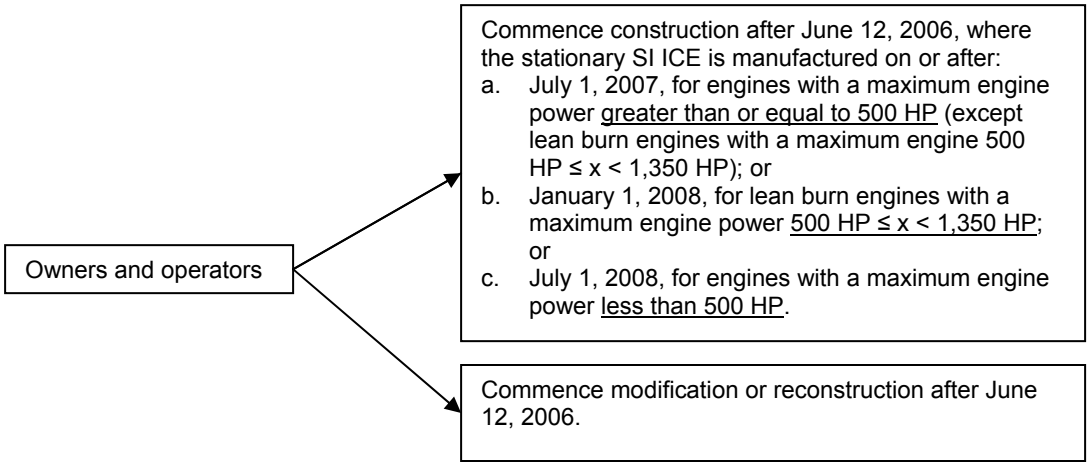
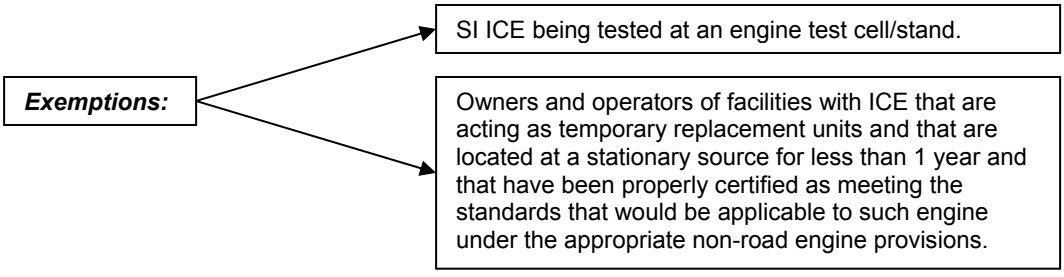
NSPS, Subpart JJJJ Non-Emergency Generator Flow Chart

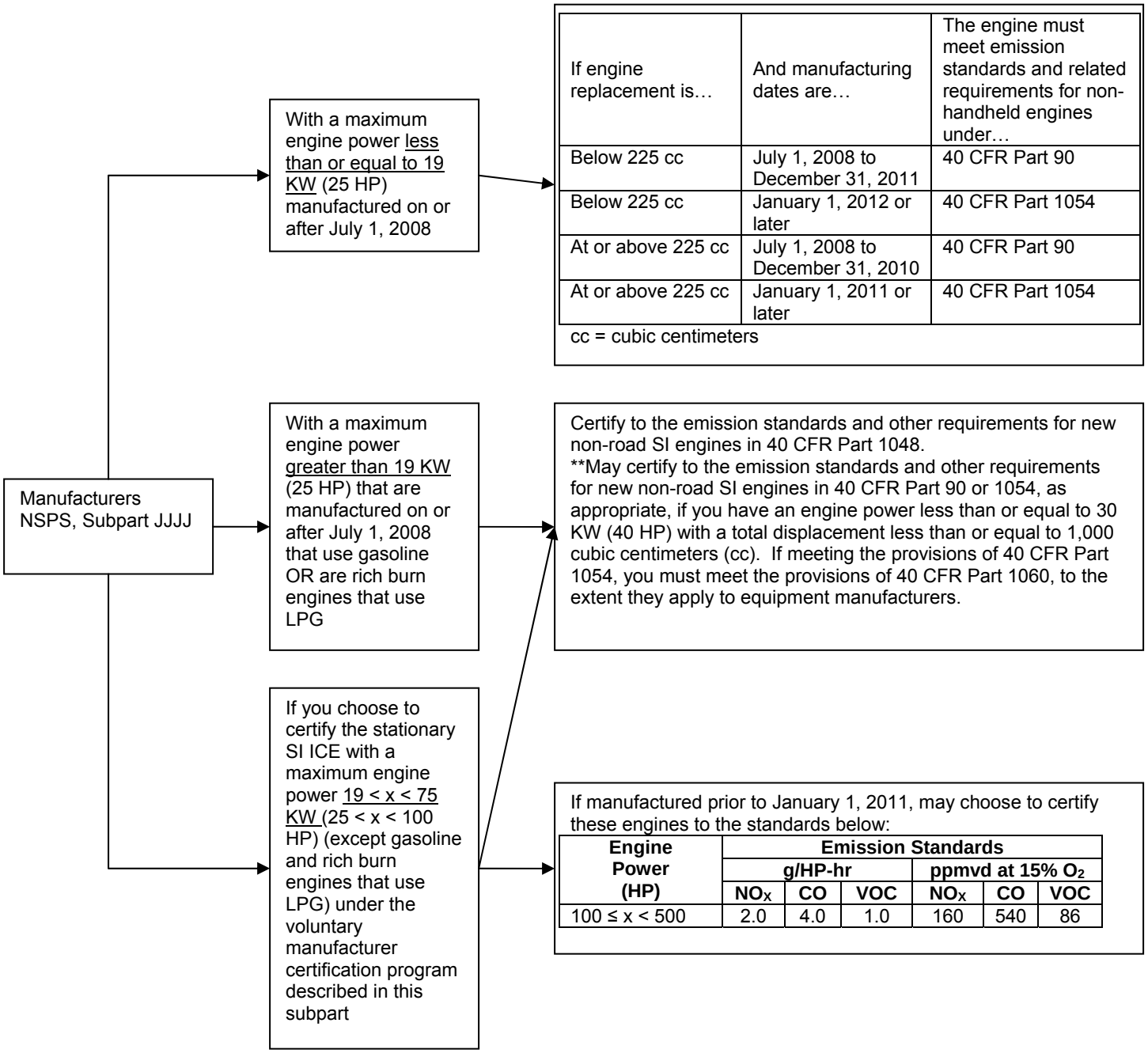
APPLICABILITY:







EMISSION LIMITS:



If engine replacement is…	And manufacturing dates are…	The engine must meet emission standards and related requirements for non-handheld engines under…
Below 225 cc	July 1, 2008 to December 31, 2011	40 CFR Part 90
Below 225 cc	January 1, 2012 or later	40 CFR Part 1054
At or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR Part 90
At or above 225 cc	January 1, 2011 or later	40 CFR Part 1054

cc = cubic centimeters

Engine Power (HP)	Emission Standards					
	g/HP-hr			ppmvd at 15% O_2		
	NO_X	CO	VOC	NO_X	CO	VOC
100 ≤ x < 500	2.0	4.0	1.0	160	540	86

Manufacturers NSPS, Subpart JJJJ (continued)

If you choose to certify the stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart

TABLE 1:

Manufacture Date	Emission Standards					
	g/HP-hr			ppmvd at 15% O_2		
	NO_X	CO	VOC	NO_X	CO	VOC
SI Natural Gas and SI Lean Burn LPG: 100 ≤ x < 500 HP						
7/1/2008	2.0	4.0	1.0	160	540	86
1/1/2011	1.0	2.0	0.7	82	270	60
SI Lean Burn Natural Gas and LPG: 500 ≤ x < 1350 HP						
1/1/2008	2.0	4.0	1.0	160	540	86
7/1/2010	1.0	2.0	0.7	82	270	60
SI Natural Gas and SI Lean Burn LPG: x ≥ 500 HP (except Lean Burn 500 ≤ x < 1350):						
7/1/2007	2.0	4.0	1.0	160	540	86
7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas: x < 500 HP (except Lean Burn 500 ≤ x < 1350 HP):						
7/1/2008	3.0	5.0	1.0	220	610	80
1/1/2011	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas: x ≥ 500 HP (except Lean Burn 500 ≤ x < 1350 HP):						
7/1/2007	3.0	5.0	1.0	220	610	80
7/1/2010	2.0	5.0	1.0	150	610	80
Landfill Gas/Digester Lean Burn (500 ≤ x < 1350 HP):						
1/1/2008	3.0	5.0	1.0	220	610	80
7/1/2010	2.0	5.0	1.0	150	610	80

**May certify to the emission standards for new nonroad SI engines in 40 CFR part 1048 if you have a lean burn engine that uses LPG.

**May certify to the emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines if you have an engine:

a. 75 ≤ x < 373 KW (100 < x < 500 HP) manufactured prior to January 1, 2011; or
b. x ≥ 373 KW (500 HP) manufactured prior to July 1, 2010.

Owners/Operators NSPS, Subpart JJJJ

With a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 OR have been modified or reconstructed after June 12, 2006

If engine replacement is…	And manufacturing dates are…	The engine must meet emission standards and related requirements for non-handheld engines under…
Below 225 cc	July 1, 2008 to December 31, 2011	40 CFR Part 90
Below 225 cc	January 1, 2012 or later	40 CFR Part 1054
At or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR Part 90
At or above 225 cc	January 1, 2011 or later	40 CFR Part 1054

With a maximum engine power greater than 19 KW (25 HP) that use gasoline OR are rich burn engines that use LPG that are manufactured on or after:

a. July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine 500 HP ≤ x < 1,350 HP); or
b. January 1, 2008, for lean burn engines with a maximum engine power 500 HP ≤ x < 1,350 HP; or
c. July 1, 2008, for engines with a maximum engine power less than 500 HP.

OR have been modified or reconstructed after June 12, 2006

Certify to the emission standards and other requirements for new non-road SI engines in 40 CFR Part 1048.
**May certify to the emission standards and other requirements for new non-road SI engines in 40 CFR Part 90 or 1054, as appropriate, if you have an engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc). If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, to the extent they apply to equipment manufacturers.

With a maximum engine power 19 < x < 75 KW (25 ≤ x < 100 HP) (except gasoline and rich burn engines that use LPG)

With a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG)

SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006

SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006

Comply with the emission standards for field testing in 40 CFR 1048.101(c).
**If manufactured prior to January 1, 2011, and were certified to the standards below, you may optionally choose to meet those standards.

Engine Power (HP)	Emission Standards					
	g/HP-hr			ppmvd at 15% O_2		
	NO_X	CO	VOC	NO_X	CO	VOC
100 ≤ x < 500	2.0	4.0	1.0	160	540	86

TABLE 1 (listed above in the manufacturer section)
**If you have an engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in TABLE 1, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

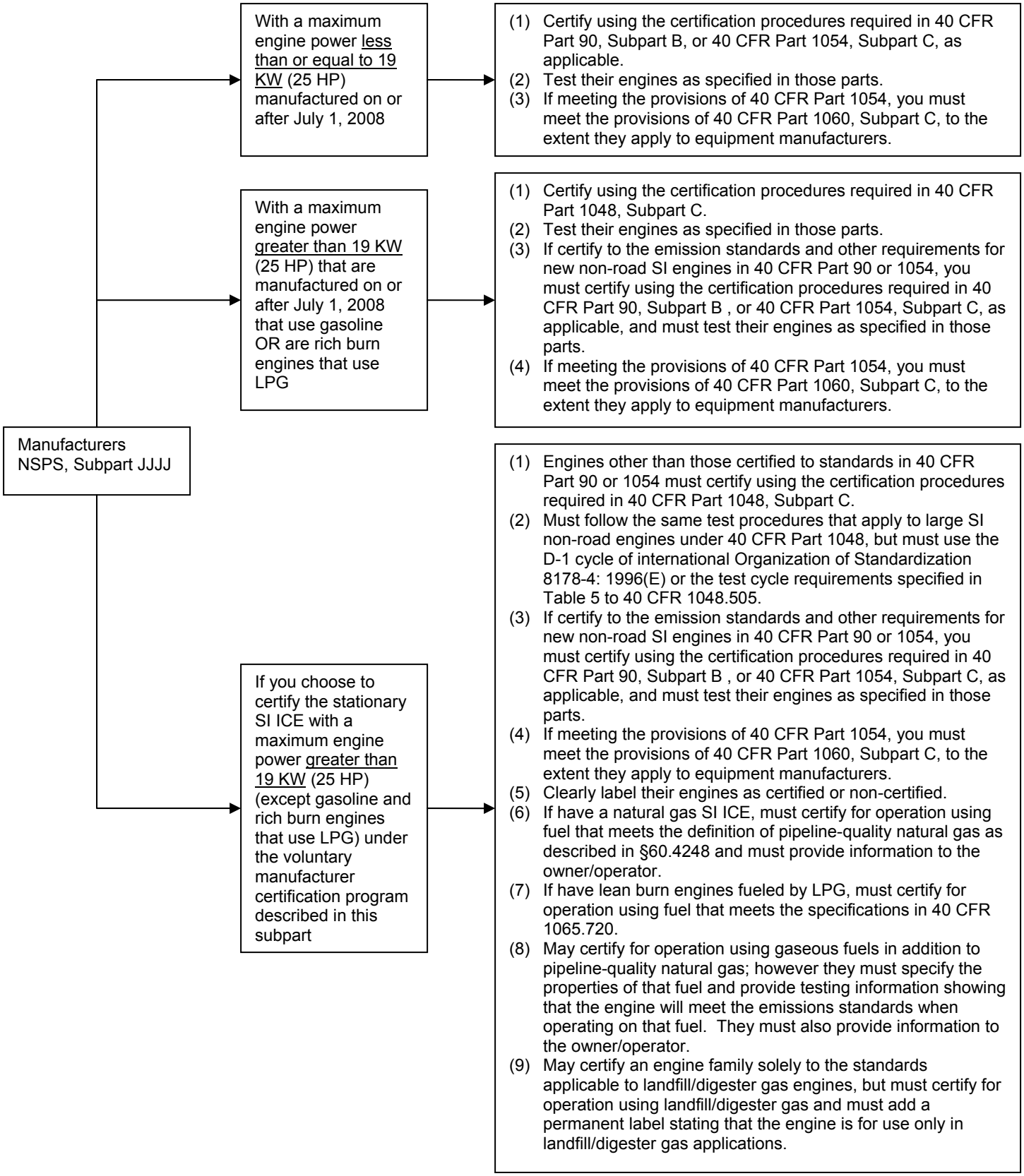
OR

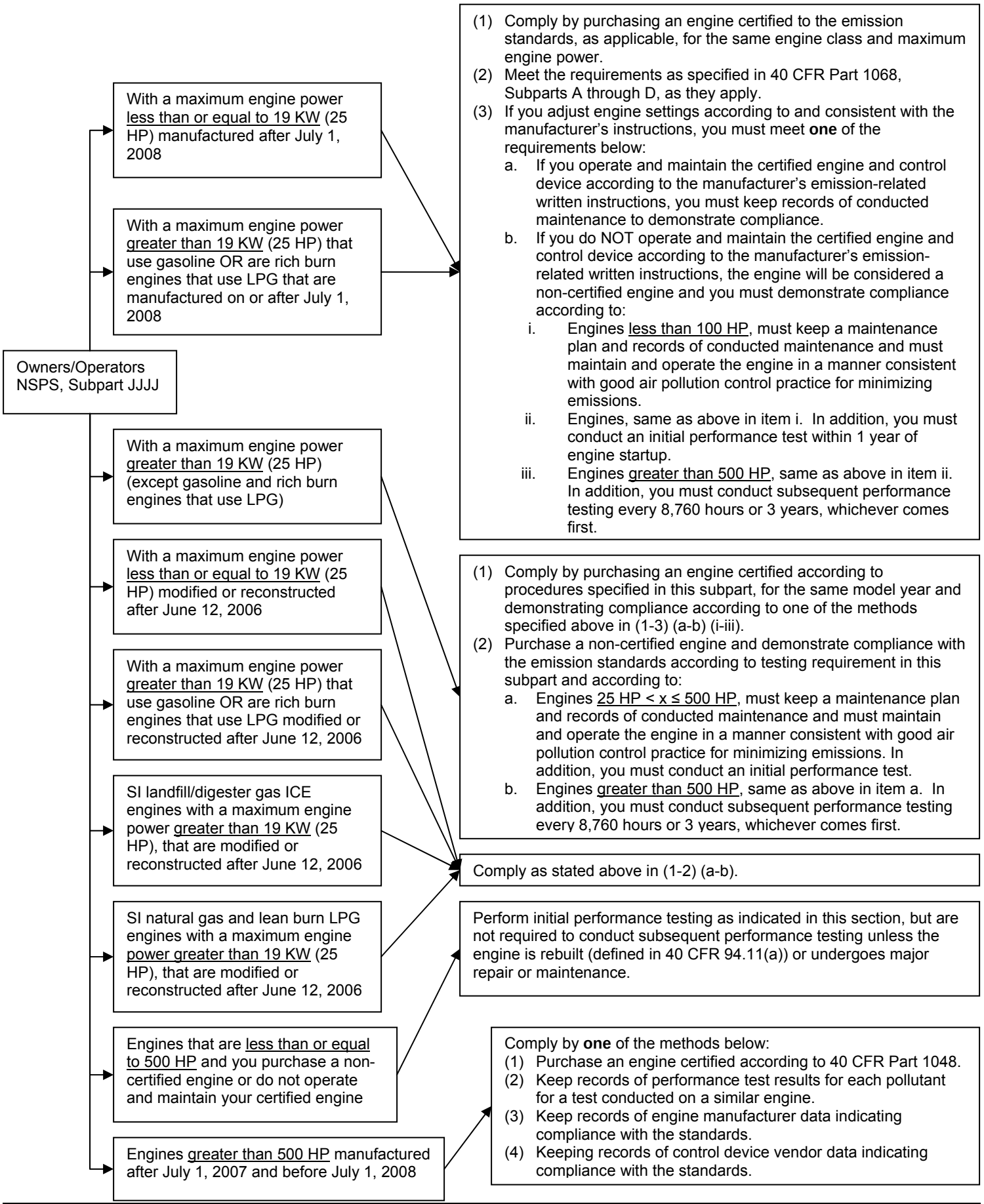
Except engines greater than or equal to 130 HP must meet:
NOx = 3.0 g/HP-hr OR NOx = 250 ppmvd at 15% O_2
CO = 4.0 g/HP-hr CO = 540 ppmvd at 15% O_2
VOC = 1.0 g/HP-hr VOC = 86 ppmvd at 15% O_2
Where the date of manufacture of the engine is:
a. Prior to July 1, 2007; x ≥ 500 HP
b. Prior to July 1, 2008; x < 500 HP
Engines less than 100 HP must meet:
CO = 5.0 g/HP-hr OR CO = 675 ppmvd at 15% O_2

Sulfur requirements for gasoline engines only

Refinery or Importer Average = 30.00 ppm
Per Gallon Cap = 80 ppm

COMPLIANCE:


Manufacturers NSPS, Subpart JJJJ
With a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008
(1) Certify using the certification procedures required in 40 CFR Part 90, Subpart B, or 40 CFR Part 1054, Subpart C, as applicable.
(2) Test their engines as specified in those parts.
(3) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
With a maximum engine power greater than 19 KW (25 HP) that are manufactured on or after July 1, 2008 that use gasoline OR are rich burn engines that use LPG
(1) Certify using the certification procedures required in 40 CFR Part 1048, Subpart C.
(2) Test their engines as specified in those parts.
(3) If certify to the emission standards and other requirements for new non-road SI engines in 40 CFR Part 90 or 1054, you must certify using the certification procedures required in 40 CFR Part 90, Subpart B , or 40 CFR Part 1054, Subpart C, as applicable, and must test their engines as specified in those parts.
(4) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
If you choose to certify the stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart
(1) Engines other than those certified to standards in 40 CFR Part 90 or 1054 must certify using the certification procedures required in 40 CFR Part 1048, Subpart C.
(2) Must follow the same test procedures that apply to large SI non-road engines under 40 CFR Part 1048, but must use the D-1 cycle of international Organization of Standardization 8178-4: 1996(E) or the test cycle requirements specified in Table 5 to 40 CFR 1048.505.
(3) If certify to the emission standards and other requirements for new non-road SI engines in 40 CFR Part 90 or 1054, you must certify using the certification procedures required in 40 CFR Part 90, Subpart B , or 40 CFR Part 1054, Subpart C, as applicable, and must test their engines as specified in those parts.
(4) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
(5) Clearly label their engines as certified or non-certified.
(6) If have a natural gas SI ICE, must certify for operation using fuel that meets the definition of pipeline-quality natural gas as described in §60.4248 and must provide information to the owner/operator.
(7) If have lean burn engines fueled by LPG, must certify for operation using fuel that meets the specifications in 40 CFR 1065.720.
(8) May certify for operation using gaseous fuels in addition to pipeline-quality natural gas; however they must specify the properties of that fuel and provide testing information showing that the engine will meet the emissions standards when operating on that fuel. They must also provide information to the owner/operator.
(9) May certify an engine family solely to the standards applicable to landfill/digester gas engines, but must certify for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications.


Owners/Operators NSPS, Subpart JJJJ
With a maximum engine power less than or equal to 19 KW (25 HP) manufactured after July 1, 2008
With a maximum engine power greater than 19 KW (25 HP) that use gasoline OR are rich burn engines that use LPG that are manufactured on or after July 1, 2008
With a maximum engine power greater than 19 KW (25 HP) (except gasoline and rich burn engines that use LPG)
With a maximum engine power less than or equal to 19 KW (25 HP) modified or reconstructed after June 12, 2006
With a maximum engine power greater than 19 KW (25 HP) that use gasoline OR are rich burn engines that use LPG modified or reconstructed after June 12, 2006
SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006
SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006
Engines that are less than or equal to 500 HP and you purchase a non-certified engine or do not operate and maintain your certified engine
Engines greater than 500 HP manufactured after July 1, 2007 and before July 1, 2008
(1) Comply by purchasing an engine certified to the emission standards, as applicable, for the same engine class and maximum engine power.
(2) Meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply.
(3) If you adjust engine settings according to and consistent with the manufacturer's instructions, you must meet one of the requirements below:
a. If you operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance.
b. If you do NOT operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to:
i. Engines less than 100 HP, must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
ii. Engines, same as above in item i. In addition, you must conduct an initial performance test within 1 year of engine startup.
iii. Engines greater than 500 HP, same as above in item ii. In addition, you must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.
(1) Comply by purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified above in (1-3) (a-b) (i-iii).
(2) Purchase a non-certified engine and demonstrate compliance with the emission standards according to testing requirement in this subpart and according to:
a. Engines 25 HP < x ≤ 500 HP, must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test.
b. Engines greater than 500 HP, same as above in item a. In addition, you must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.
Comply as stated above in (1-2) (a-b).
Perform initial performance testing as indicated in this section, but are not required to conduct subsequent performance testing unless the engine is rebuilt (defined in 40 CFR 94.11(a)) or undergoes major repair or maintenance.
Comply by one of the methods below:
(1) Purchase an engine certified according to 40 CFR Part 1048.
(2) Keep records of performance test results for each pollutant for a test conducted on a similar engine.
(3) Keep records of engine manufacturer data indicating compliance with the standards.
(4) Keeping records of control device vendor data indicating compliance with the standards.

TESTING:

Owners/Operators who conduct performance tests →

(1) Must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
(2) Cannot conduct performance tests during periods of startup, shutdown, or malfunction as specified in §60.8. If the engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
(3) Conduct 3 separate test runs for each performance test required, as specified in §60.8(f). Each test run must be conducted within 10% of 100% peak (or the highest achievable) load and last at least 1 hour.
(4) Follow 40 CFR 60.4244 (d-g) to determine compliance with specific pollutants.

NOTIFICATION, REPORTING, AND RECORDKEEPING:

Owners/Operators NSPS, Subpart JJJJ →

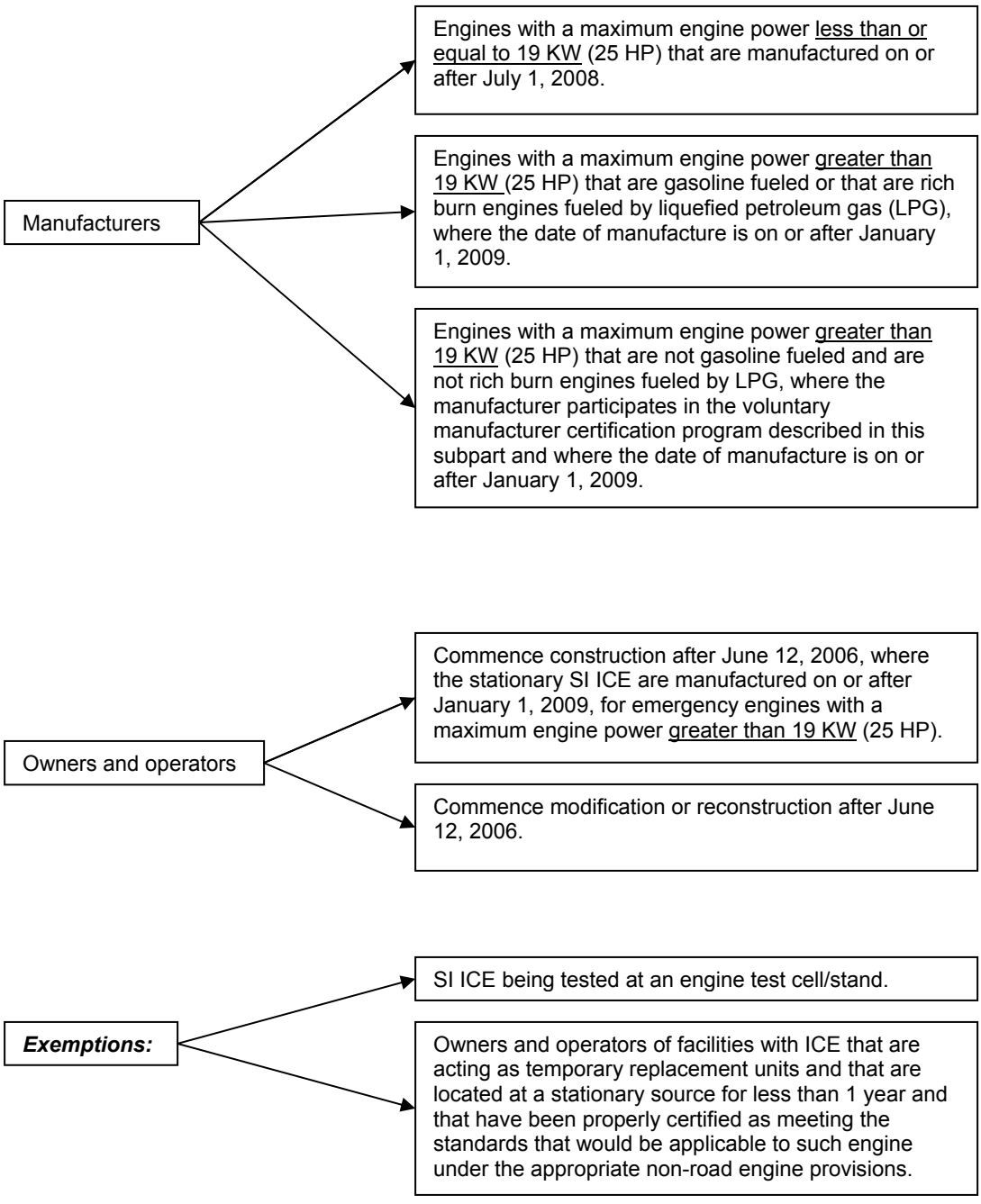
(1) Keep records of the following:
- All notifications submitted to comply with this subpart and all documentation supporting any notification.
- Maintenance conducted on the engine.
- If the engine is certified, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
- If the engine is not certified or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards.

(2) Engines greater than or equal to 500 HP that have not been certified by an engine manufacturer must submit an initial notification as required in §60.7(a)(1) and must include:
- Name and address of the owner/operator
- The address of the affected source
- Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement
- Emission control equipment
- Fuel used

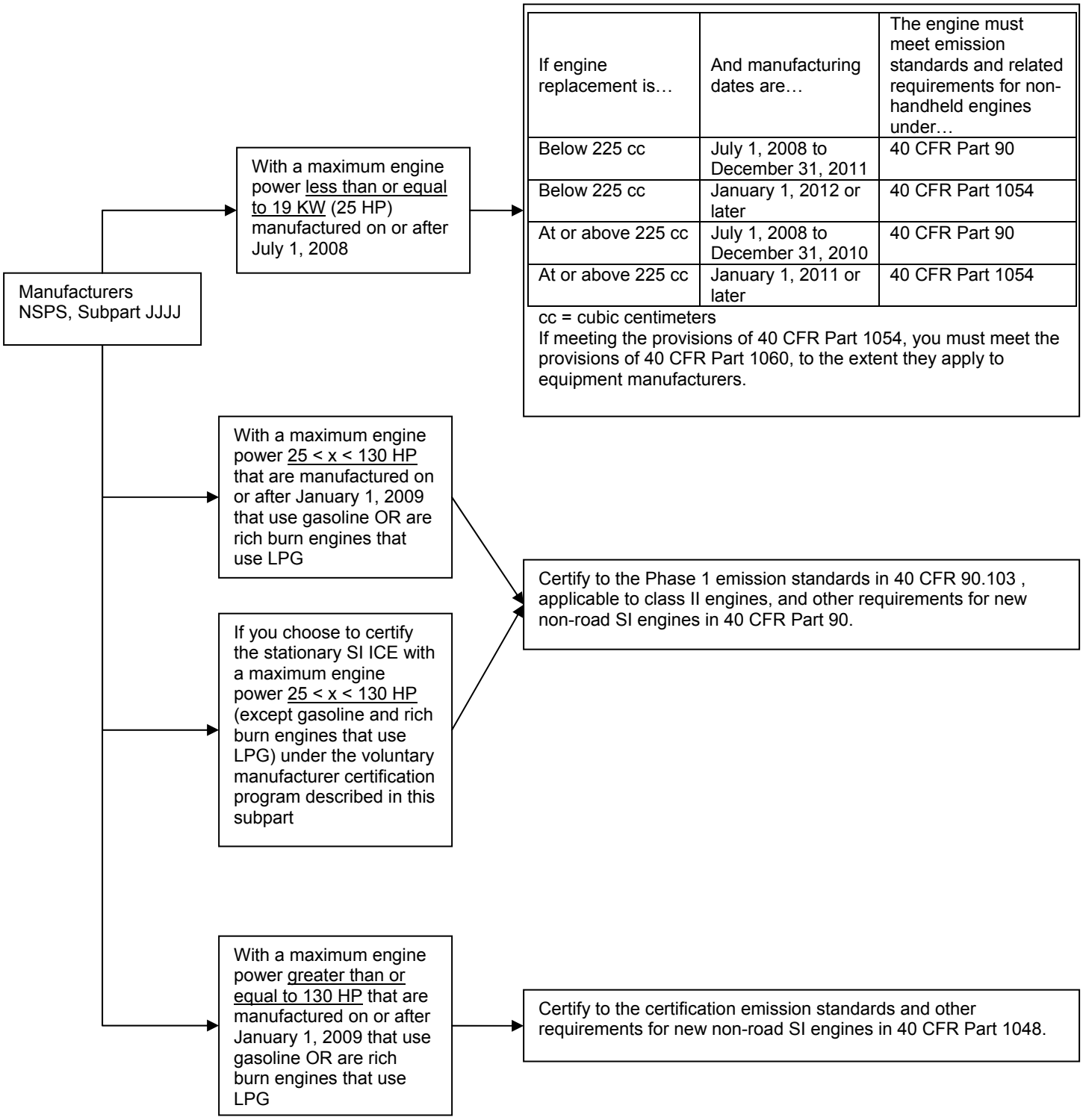
(3) If subject to performance testing, must submit a copy of each performance test within 60 days after the test has been completed.

NSPS, Subpart JJJJ Emergency Generator Flow Chart

APPLICABILITY:



EMISSION LIMITS:



If engine replacement is…	And manufacturing dates are…	The engine must meet emission standards and related requirements for non-handheld engines under…
Below 225 cc	July 1, 2008 to December 31, 2011	40 CFR Part 90
Below 225 cc	January 1, 2012 or later	40 CFR Part 1054
At or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR Part 90
At or above 225 cc	January 1, 2011 or later	40 CFR Part 1054

cc = cubic centimeters
If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, to the extent they apply to equipment manufacturers.

Manufacturers NSPS, Subpart JJJJ (continued)

If you choose to certify the stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart

TABLE 1:

Manufacture Date	Emission Standards					
	g/HP-hr			ppmvd at 15% O_2		
	NO_X	CO	VOC	NO_X	CO	VOC
Landfill/Digester Gas: x < 500 HP (except Lean Burn 500 ≤ x < 1350 HP):						
7/1/2008	3.0	5.0	1.0	220	610	80
1/1/2011	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas: x ≥ 500 HP (except Lean Burn 500 ≤ x < 1350 HP):						
7/1/2007	3.0	5.0	1.0	220	610	80
7/1/2010	2.0	5.0	1.0	150	610	80
Landfill Gas/Digester Lean Burn (500 ≤ x < 1350 HP):						
1/1/2008	3.0	5.0	1.0	220	610	80
7/1/2010	2.0	5.0	1.0	150	610	80
Emergency: 25 < x < 130						
1/1/2009	10	387	n/a	n/a	n/a	n/a
Emergency: x ≥ 130 HP						
1/1/2009	2.0	4.0	1.0	160	540	86

The NO_X emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X + HC.

**May certify to the emission standards for new non-road SI engines in 40 CFR part 1048 if you have a lean burn engine that uses LPG.

**May certify to the emission standards for new non-road SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines if you have an engine:

a. 75 ≤ x < 373 KW (100 < x < 500 HP) manufactured prior to January 1, 2011; or
b. x ≥ 373 KW (500 HP) manufactured prior to July 1, 2010.

Owners/Operators NSPS, Subpart JJJJ

With a maximum engine power less than or equal to 25 HP (19 KW) manufactured on or after July 1, 2008 or have been modified or reconstructed after June 12, 2006

If engine replacement is…	And manufacturing dates are…	The engine must meet emission standards and related requirements for non-handheld engines under…
Below 225 cc	July 1, 2008 to December 31, 2011	40 CFR Part 90
Below 225 cc	January 1, 2012 or later	40 CFR Part 1054
At or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR Part 90
At or above 225 cc	January 1, 2011 or later	40 CFR Part 1054

cc = cubic centimeters
If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, to the extent they apply to equipment manufacturers.

With a maximum engine power 25 < x < 130 HP that are manufactured on or after January 1, 2009 (or have been modified or reconstructed after June 12, 2006) that use gasoline OR are rich burn engines that use LPG

Certify to the Phase 1 emission standards in 40 CFR 90.103 , applicable to class II engines (HC + NOx = 13.4 g/kW-hr; CO = 519 g/kW-hr), and other requirements for new non-road SI engines in 40 CFR Part 90.

With a maximum engine power greater than or equal to 130 HP that are manufactured on or after January 1, 2009 (or have been modified or reconstructed after June 12, 2006) that use gasoline OR are rich burn engines that use LPG

Certify to the certification emission standards and other requirements for new non-road SI engines in 40 CFR Part 1048.

With a maximum engine power 25 < x < 100 HP (19 < x < 75 KW) (except gasoline and rich burn engines that use LPG)

Engine Power	Emission Standards					
	g/HP-hr			ppmvd at 15% O_2		
	NO_X	CO	VOC	NO_X	CO	VOC
25 < x < 130 HP	10	387	--	--	--	--

**The emission standard for NOx applicable to emergency engines 25 < x < 130 HP is in terms of NO_X+HC.

With a maximum engine power greater than or equal to 100 HP (75 KW) (except gasoline and rich burn engines that use LPG)

TABLE 1 (listed above in the manufacturer section)
**If you have an engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in TABLE 1, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006

OR

Natural gas and lean burn LPG engines with a maximum engine power greater than 25 HP that are modified or reconstructed after June 12, 2006

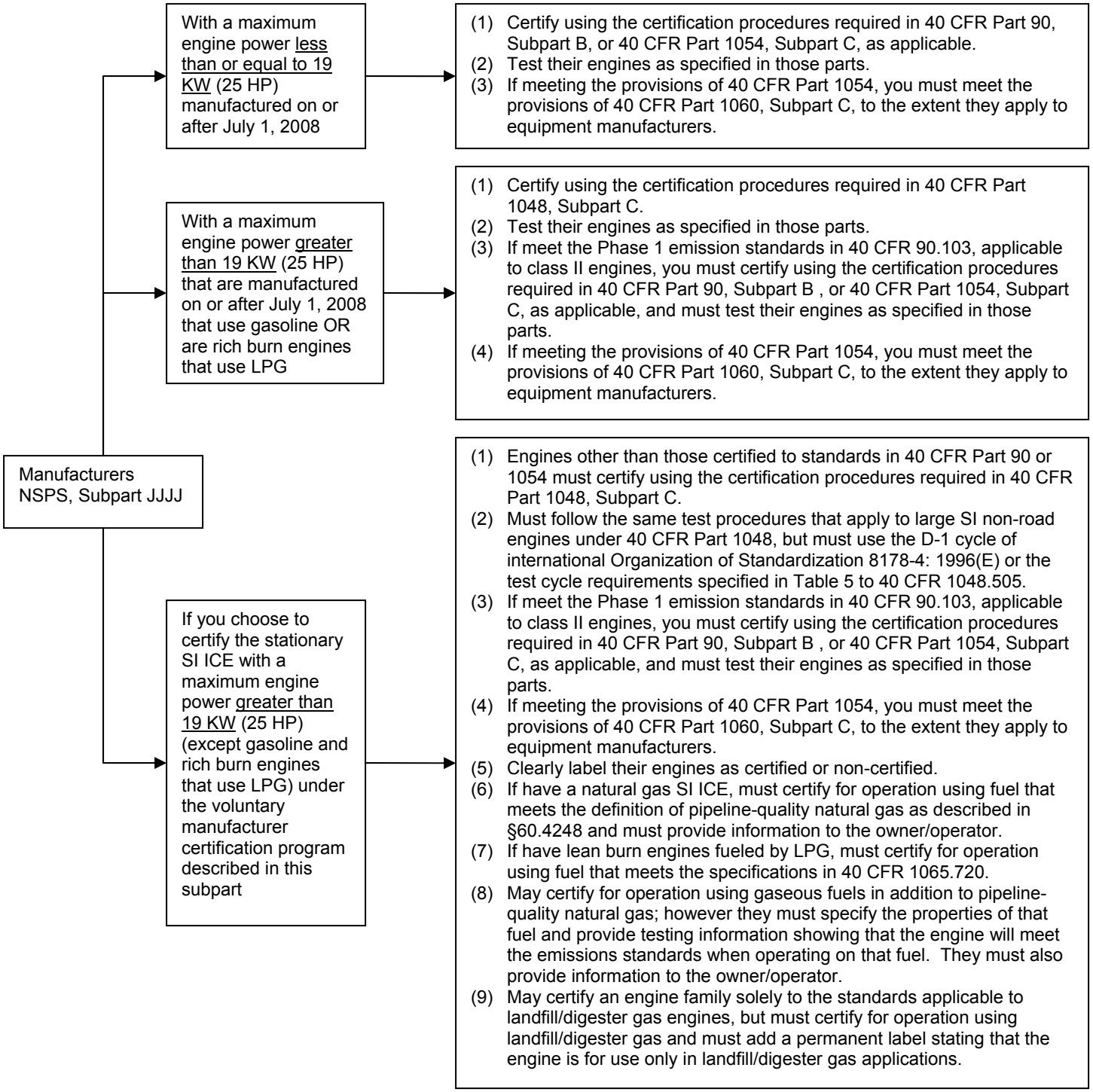
Except engines greater than or equal to 130 HP must meet:
NOx = 3.0 g/HP-hr OR NOx = 250 ppmvd at 15% O_2
CO = 4.0 g/HP-hr CO = 540 ppmvd at 15% O_2
VOC = 1.0 g/HP-hr VOC = 86 ppmvd at 15% O_2
Where the date of manufacture of the engine is January 1, 2009.

Engines less than 100 HP must meet:
CO = 5.0 g/HP-hr OR CO = 675 ppmvd at 15% O_2

Sulfur requirements for gasoline engines only

Refinery or Importer Average = 30.00 ppm
Per Gallon Cap = 80 ppm

COMPLIANCE:


Manufacturers
NSPS, Subpart JJJJ
With a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008
(1) Certify using the certification procedures required in 40 CFR Part 90, Subpart B, or 40 CFR Part 1054, Subpart C, as applicable.
(2) Test their engines as specified in those parts.
(3) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
With a maximum engine power greater than 19 KW (25 HP) that are manufactured on or after July 1, 2008 that use gasoline OR are rich burn engines that use LPG
(1) Certify using the certification procedures required in 40 CFR Part 1048, Subpart C.
(2) Test their engines as specified in those parts.
(3) If meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, you must certify using the certification procedures required in 40 CFR Part 90, Subpart B , or 40 CFR Part 1054, Subpart C, as applicable, and must test their engines as specified in those parts.
(4) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
If you choose to certify the stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart
(1) Engines other than those certified to standards in 40 CFR Part 90 or 1054 must certify using the certification procedures required in 40 CFR Part 1048, Subpart C.
(2) Must follow the same test procedures that apply to large SI non-road engines under 40 CFR Part 1048, but must use the D-1 cycle of international Organization of Standardization 8178-4: 1996(E) or the test cycle requirements specified in Table 5 to 40 CFR 1048.505.
(3) If meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, you must certify using the certification procedures required in 40 CFR Part 90, Subpart B , or 40 CFR Part 1054, Subpart C, as applicable, and must test their engines as specified in those parts.
(4) If meeting the provisions of 40 CFR Part 1054, you must meet the provisions of 40 CFR Part 1060, Subpart C, to the extent they apply to equipment manufacturers.
(5) Clearly label their engines as certified or non-certified.
(6) If have a natural gas SI ICE, must certify for operation using fuel that meets the definition of pipeline-quality natural gas as described in §60.4248 and must provide information to the owner/operator.
(7) If have lean burn engines fueled by LPG, must certify for operation using fuel that meets the specifications in 40 CFR 1065.720.
(8) May certify for operation using gaseous fuels in addition to pipeline-quality natural gas; however they must specify the properties of that fuel and provide testing information showing that the engine will meet the emissions standards when operating on that fuel. They must also provide information to the owner/operator.
(9) May certify an engine family solely to the standards applicable to landfill/digester gas engines, but must certify for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications.

Owners/Operators NSPS, Subpart JJJJ

- With a maximum engine power less than or equal to 19 KW (25 HP) manufactured after July 1, 2008
- With a maximum engine power greater than or equal to 25 HP that are manufactured on or after January 1, 2009 that use gasoline OR are rich burn engines that use LPG

→
(1) Comply by purchasing an engine certified to the emission standards, as applicable, for the same engine class and maximum engine power.
(2) Meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply.
(3) If you adjust engine settings according to and consistent with the manufacturer's instructions, you must meet **one** of the requirements below:
   a. If you operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance.
   b. If you do NOT operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to:
      i. Engines less than 100 HP, must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
      ii. Engines, same as above in item i. In addition, you must conduct an initial performance test within 1 year of engine startup.
      iii. Engines greater than 500 HP, same as above in item ii. In addition, you must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.

- With a maximum engine power greater than 25 HP (19 KW) (except gasoline and rich burn engines that use LPG)
- With a maximum engine power less than or equal to 25 HP (19 KW) modified or reconstructed after June 12, 2006
- With a maximum engine power 25 < x < 130 HP modified or reconstructed after June 12, 2006 that use gasoline OR are rich burn engines that use LPG

→
(1) Comply by purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified above in (1-3) (a-b) (i-iii).
(2) Purchase a non-certified engine and demonstrate compliance with the emission standards according to testing requirement in this subpart and according to:
   a. Engines 25 HP < x ≤ 500 HP, must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test.
   b. Engines greater than 500 HP, same as above in item a. In addition, you must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.

- SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006
- SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006

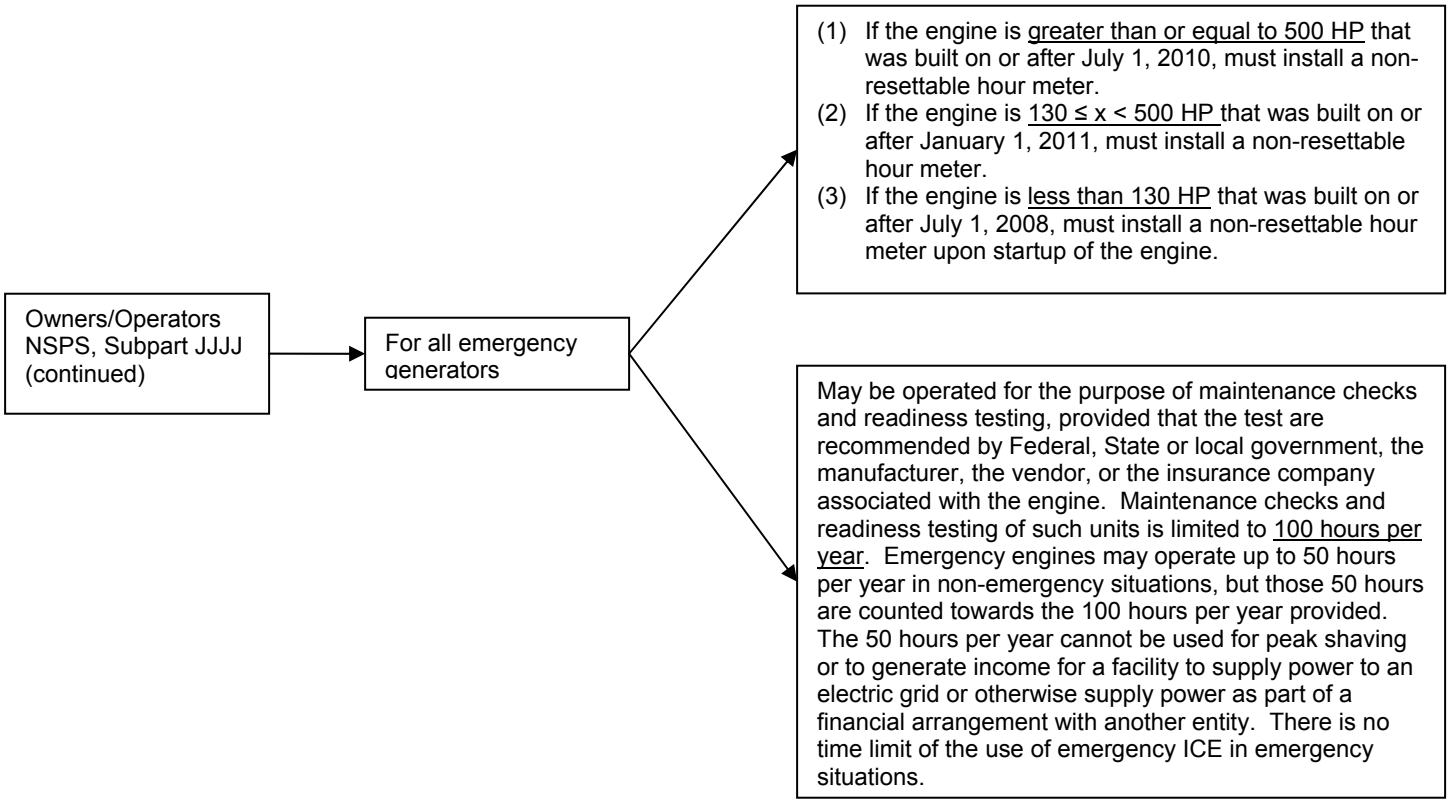
→ Comply as stated above in (1-2) (a-b).

- Engines that are less than or equal to 500 HP and you purchase a non-certified engine or do not operate and maintain your certified engine

→ Perform initial performance testing as indicated in this section, but are not required to conduct subsequent performance testing unless the engine is rebuilt (defined in 40 CFR 94.11(a)) or undergoes major repair or maintenance.

- Engines greater than 500 HP manufactured after July 1, 2007 and before July 1, 2008

→ Comply by **one** of the methods below:
(1) Purchase an engine certified according to 40 CFR Part 1048.
(2) Keep records of performance test results for each pollutant for a test conducted on a similar engine.
(3) Keep records of engine manufacturer data indicating compliance with the standards.
(4) Keeping records of control device vendor data indicating compliance with the standards.


Owners/Operators NSPS, Subpart JJJJ (continued)
For all emergency generators
(1) If the engine is greater than or equal to 500 HP that was built on or after July 1, 2010, must install a non-resettable hour meter.
(2) If the engine is 130 ≤ x < 500 HP that was built on or after January 1, 2011, must install a non-resettable hour meter.
(3) If the engine is less than 130 HP that was built on or after July 1, 2008, must install a non-resettable hour meter upon startup of the engine.
May be operated for the purpose of maintenance checks and readiness testing, provided that the test are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. Emergency engines may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided. The 50 hours per year cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. There is no time limit of the use of emergency ICE in emergency situations.

TESTING:

Owners/Operators who conduct performance tests →

(1) Must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
(2) Cannot conduct performance tests during periods of startup, shutdown, or malfunction as specified in §60.8. If the engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
(3) Conduct 3 separate test runs for each performance test required, as specified in §60.8(f). Each test run must be conducted within 10% of 100% peak (or the highest achievable) load and last at least 1 hour.
(4) Follow 40 CFR 60.4244 (d-g) to determine compliance with specific pollutants.

NOTIFICATION, REPORTING, AND RECORDKEEPING:

Owners/Operators NSPS, Subpart JJJJ →

(1) Keep records of the following:
- All notifications submitted to comply with this subpart and all documentation supporting any notification.
- Maintenance conducted on the engine.
- If the engine is certified, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
- If the engine is not certified or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards.

(2) Engines greater than or equal to 500 HP that have not been certified by an engine manufacturer must submit an initial notification as required in §60.7(a)(1) and must include:
- Name and address of the owner/operator
- The address of the affected source
- Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement
- Emission control equipment
- Fuel used

(3) If subject to performance testing, must submit a copy of each performance test within 60 days after the test has been completed.
(4) If have a non-resettable hour meter, must keep records of the hours of operation of the engine. The owner/operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.