PUBLIC

Kansas Department of Health and Environment
Bureau of Air
1000 SW Jackson, Suite 310, Topeka, Kansas 66612-1366

Regulatory Guidance
Area Source RICE - BOA 2011-01

Purpose: There are two source categories under the Environmental Protection Agency's (EPA) Maximum Achievable Control Technology (MACT) regulations: major and area sources. On March 3, 2010 and August 20, 2010 the EPA finalized MACT regulations under the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE) as amendments to subpart ZZZZ, primarily for area sources. Kansas Administrative Regulation 28-19-300, which requires construction permits and/or approvals, was promulgated prior to area source RICE requirements. The RICE MACT regulations do not require construction permits or approvals for area sources, although some do have applicable requirements such as notification, emission limitations, operating limits, etc.

The applicable requirements vary depending on the engine's category. RICE includes municipal power plants burning diesel and natural gas, irrigation engines, natural gas compressor stations, oil and water pipeline pump stations, generators at hospitals, schools and manufacturing facilities, rock crushing equipment, meat packing plants and many other industrial sources. Some previously unregulated engines are now subject to certification, emission standards which may require performance testing, restriction of operating hours, and/or the addition of pollution control equipment.

Policy: RICE area sources will not be required to obtain the same level of approval under 28-19-300(b) as RICE which are major sources that must apply for and obtain a permit or approval under KAR 28-19-300(a). The Bureau of Air will acknowledge submittal of required notifications but will not separately require construction permitting or approval.

A flow-chart and Tables 1 and 2 for applicability determinations are attached.

Acronyms:

CAA	Clean Air Act
CFR	Code of Federal Regulations
KAR	Kansas Administrative Regulations
MACT	Maximum Achievable Control Technology: requirements found in 40 CFR Part 63
NESHAP	National Emission Standards for Hazardous Air Pollutants, refers to requirements found in 40 CFR Part 61, and MACT standards in Part 63.
NSPS	New Source Performance Standards, refers to requirements found in 40 CFR Part 60
RICE	Reciprocating Internal Combustion Engines

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12/7/11

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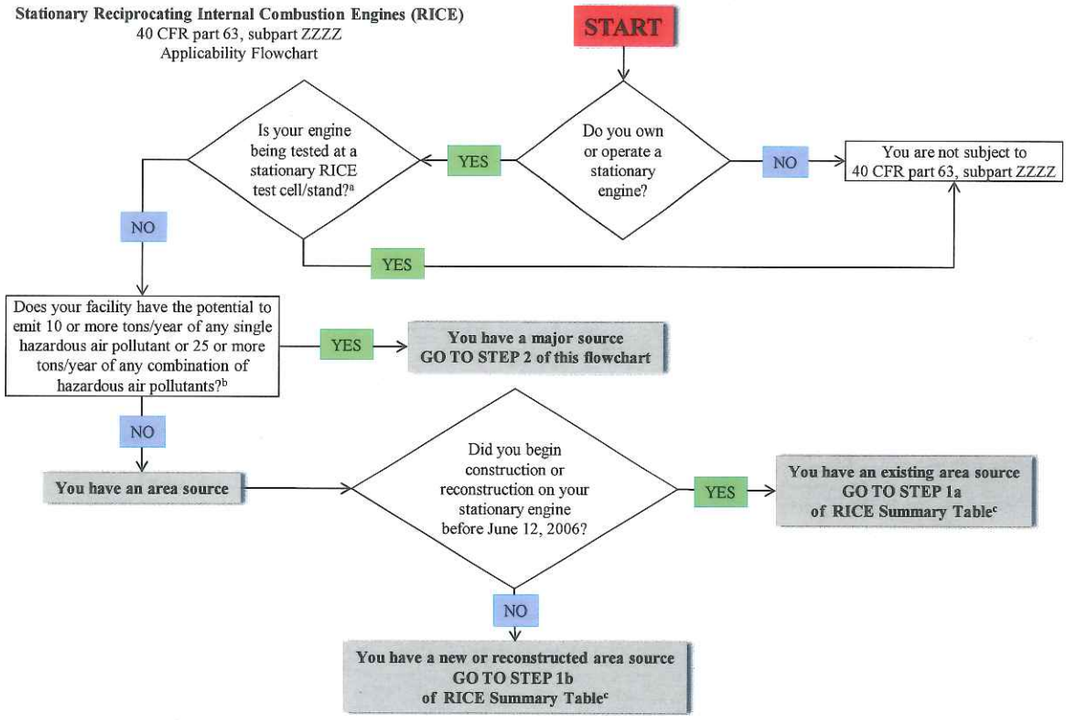
Approved by:

12/7/2011

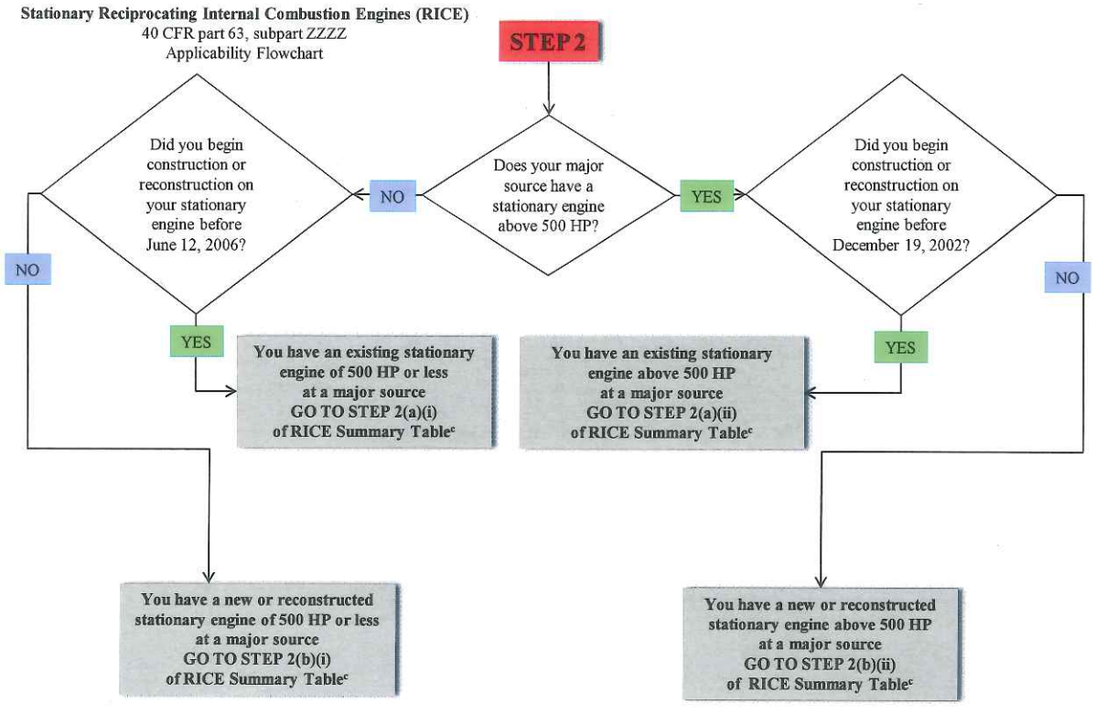
Rick Brunetti, Director
Bureau of Air

Stationary Reciprocating Internal Combustion Engines (RICE)
40 CFR part 63, subpart ZZZZ
Applicability Flowchart



[a]An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.
[b]For assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff.

Stationary Reciprocating Internal Combustion Engines (RICE)
40 CFR part 63, subpart ZZZZ
Applicability Flowchart



[c]The RICE Summary Table of Requirements provides additional information on 40 CFR part 63, subpart ZZZZ requirements and is available at http://www.epa.gov/ttn/atw/rice/ricepg.html.

Engine Category	Date Constructed	Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Tests	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Stationary RICE at Area Sources													
STEP 1a - Existing Area Sources													
Existing Stationary Engine ≤500 HP Located at Area Sources of HAP													
Emergency CI	Before 6/12/2006	5/3/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h), (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 2 of Table 2d	Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
Non-Emergency CI 300<HP≤500	Before 6/12/2006	5/3/2013	63.6603 Table 2d	No Requirements	>300 HP with displacement <30 l/cyl: 63.6604	63.6612 63.6620 Table 4 Table 5	63.6625(h) ≥300 HP: 63.6625(g)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c) and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency CI ≤300 HP	Before 6/12/2006	5/3/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Emergency SI	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 2 of Table 2d	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SLB	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 2SLB	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SRB	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency Landfill/Digester Gas	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Residential/Commerical/Institutional Emergency CI	Before 6/12/2006	5/3/2013	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.										
Residential/Commerical/Institutional Emergency SI	Before 6/12/2006	10/19/2013	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.										

Engine Category	Date Constructed	Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Tests	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Existing Stationary Engine >500 HP Located at Area Sources of HAP													
Emergency CI	Before 6/12/2006	5/3/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h,) (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 2 of Table 2d	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency CI	Before 6/12/2006	5/3/2013	63.6603 Table 2d	63.6603 Table 2b	>300 HP with displacement <30 l/cyl: 63.6604	63.6612 63.6615 63.6620 Table 3	63.6625(a), (b), (g), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e) and (f))	63.6650 (except 63.6650(g))	Yes
Emergency SI	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 2 of Table 2d	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SLB (that operate **more than** 24 hours per year)	Before 6/12/2006	10/19/2013	63.6603 Table 2d	63.6603 Table 2b	No Requirements	63.6612 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e) and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 4SLB (that operate **24 hours or less** per year)	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 2SLB	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SRB (that operate **more than** 24 hours per year)	Before 6/12/2006	10/19/2013	63.6603 Table 2d	63.6603 Table 1b	No Requirements	63.6612 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e) and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 4SRB (that operate **24 hours or less** per year)	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency Landfill/Digester Gas	Before 6/12/2006	10/19/2013	63.6603 Table 2d	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Residential/Commerical/Institutional Emergency CI	Before 6/12/2006	5/3/2013	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.										
Residential/Commerical/Institutional Emergency SI	Before 6/12/2006	10/19/2013	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.										

[a]Note that certain engines covered under 40 CFR part 63, subpart ZZZZ, may be subject to additional requirements under 40 CFR part 60, subparts IIII and JJJJ.

[b]For assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn/chief/ap42

[c]Note emergency engines have to comply with the definition of an emergency stationary RICE, which includes being operated per the requirements in 40 CFR 63.6640(f).

Abbreviations:
CI-Compression Ignition
SI-Spark Ignition
4SLB-4 Stroke Lean Burn
2SLB-2 Stroke Lean Burn
4SRB-4 Stroke Rich Burn

Summary of Requirements

Engine Category	Date Constructed	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Tests	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Stationary RICE at Area Sources												
STEP 1b - New & Reconstructed Area Sources												
New & Reconstructed Stationary Engine ≤500 HP Located at Area Source of HAP												
Limited Use	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.										
Emergency	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.										
Non-Emergency CI	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS)										
SI 4SLB	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
SI 2SLB	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
SI 4SRB	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
Landfill/Digester Gas	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
New & Reconstructed Stationary Engine >500 HP Located at Area Source of HAP												
Limited Use	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.										
Emergency	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.										
Non-Emergency CI	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS)										
SI 4SLB	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
SI 2SLB	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
SI 4SRB	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										
Landfill/Digester Gas	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)										

[a]Note that certain engines covered under 40 CFR part 63, subpart ZZZZ, may be subject to additional requirements under 40 CFR part 60, subparts IIII and JJJJ.

[b]For assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn

Abbreviations:
CI-Compression Ignition
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4SRB-4 Stroke Rich Burn

Summary of Requirements

Engine Category	Date Constructed	Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Tests	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Stationary RICE at Major Sources													
STEP 2(a)(i)													
Existing Stationary Engine ≤500 HP Located at Major Source of HAP													
Emergency CI	Before 6/12/2006	5/3/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h), (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 1 of Table 2c	Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
Non-Emergency CI 100≤HP≤500	Before 6/12/2006	5/3/2013	63.6602 Table 2c	No Requirements	>300 HP with displacement <30 l/cyl: 63.6604	63.6612 63.6620 Table 4 Table 5	63.6625(h) ≥300 HP: 63.6625(g)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency CI <100 HP	Before 6/12/2006	5/3/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625 (e), (h), (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
Emergency SI	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (f), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 1 of Table 2c	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SLB 100≤HP≤500	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	63.6612 63.6620 Table 4 Table 5	63.6625(h)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 4SLB <100 HP	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 2SLB 100≤HP≤500	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	63.6612 63.6620 Table 4 Table 5	63.6625(h)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 2SLB <100 HP	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency SI 4SRB 100≤HP≤500	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	63.6612 63.6620 Table 4 Table 5	63.6625(h)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 4SRB <100 HP	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
Non-Emergency Landfill/Digester Gas 100≤HP≤500	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	63.6612 63.6620 Table 4 Table 5	63.6625(h)	63.6630 Table 5	63.6605 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency Landfill/Digester Gas <100 HP	Before 6/12/2006	10/19/2013	63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (h), (j)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c) and (f))	No Requirements	Yes, except per 63.6645(a)(5), the following do not apply:
STEP 2(a)(ii)													
Existing Stationary Engine >500 HP Located at Major Source of HAP													
Limited Use	Before 12/19/2002	No Requirements											
Emergency	Before 12/19/2002	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.											
Non-Emergency CI	Before 12/19/2002	5/3/2013	63.6600(d) Table 2c	63.6600(d) Table 2h	>300 HP and <30 l/cyl:63.6604	63.6610 63.6615 63.6620 Table 3 Table 4 Table 5	63.6625(a), (b), (g), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650(g))	Yes
Non-Emergency SI 4SLB	Before 12/19/2002	6/15/2007	No Requirements										
Non-Emergency SI 2SLB	Before 12/19/2002	6/15/2007	No Requirements										
Non-Emergency SI 4SRB	Before 12/19/2002	6/15/2007	63.6600(a) Table 1a	63.6600(a) Table 1b	No Requirements	63.6610 63.6615 63.6620 Table 3 Table 4	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Landfill/Digester Gas	Before 12/19/2002	No Requirements											

[a]Note that certain engines covered under 40 CFR part 63, subpart ZZZZ, may be subject to additional requirements under 40 CFR part 60, subparts IIII and JJJJ.

[b]For assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn/chief/ap42/c

[c]**Note emergency engines have to comply with the definition of an emergency stationary RICE, which includes being operated per the requirements in 40 CFR 63.6640(f).**

Abbreviations:
CI-Compression Ignition
SI-Spark Ignition
4SLB-4 Stroke Lean Burn
2SLB-2 Stroke Lean Burn
4SRB-4 Stroke Rich Burn

Engine Category	Date Constructed	Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Tests	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Stationary RICE at Major Sources													
STEP 2(b)(i)													
New & Reconstructed Stationary Engine ≤500 HP Located at Major Source of HAP													
Limited Use	On or After	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.											
Emergency	On or After	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS) or subpart JJJJ (SI NSPS), as applicable.											
Non-Emergency CI	On or After	Engines are subject to 40 CFR part 60, subpart IIII (CI NSPS)											
SI 4SLB <250 HP	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)											
Non-Emergency SI 4SLB ≥250 HP	On or After 6/12/2006	No Requirements											
Non-Emergency SI 4SLB ≥250 HP	Manufactured on or after 1/1/2008	Upon Startup	63.6601 Table 2a	63.6601 Table 2b	No Requirements	63.6611 63.6615 63.6620 Table 3 Table 4 Table 5	63.6625(h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Emergency SI 4SLB ≥250 HP	Manufactured on or after 1/1/2008	Upon Startup	No Requirements	No Requirements	No Requirements	No Requirements	63.6625(d), (h)	No Requirements	63.6605 63.6640	No Requirements	No Requirements	No Requirements	Yes
SI 2SLB	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)											
SI 4SRB	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)											
Landfill/Digester Gas	On or After	Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS)											
STEP 2(b)(ii)													
New & Reconstructed Stationary Engine >500 HP Located at Major Source of HAP													
Limited Use	On or After 12/19/2002	Upon Startup	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	63.6605	63.6645(f)	No Requirements	No Requirements	No (except as specified in
Emergency	On or After 12/19/2002	Upon Startup	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	63.6605 63.6640	63.6645(f)	No Requirements	No Requirements	No (except as specified in 63.6645(f))
Non-Emergency CI	On or After 12/19/2002	Upon Startup	63.6600(b) Table 2a	63.6600(b) Table 2b	No Requirements	63.6610 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Non-Emergency SI 4SLB	On or After 12/19/2002	Upon Startup	63.6600(b) Table 2a	63.6600(b) Table 2b	No Requirements	63.6610 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Non-Emergency SI 2SLB	On or After 12/19/2002	Upon Startup	63.6600(b) Table 2a	63.6600(b) Table 2b	No Requirements	63.6610 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Non-Emergency SI 4SRB	On or After 12/19/2002	Upon Startup	63.6600(a) Table 1a	63.6600(a) Table 1b	No Requirements	63.6610 63.6615 63.6620 Table 3	63.6625(a), (b), (h), (k)	63.6630 Table 5	63.6605 63.6635 63.6640	63.6645	63.6655 (except 63.6655(c), (e), and (f))	63.6650 (except 63.6650 (g))	Yes
Landfill/Digester Gas	On or After 12/19/2002	Upon Startup	No Requirements	No Requirements	No Requirements	No Requirements	≥10 percent of the gross heat input on	No Requirements	63.6605	≥10 percent of the gross heat input on	≥10 percent of the gross heat input on	≥10 percent of the gross heat input on	No (except as specified in

[a]Note that certain engines covered under 40 CFR part 63, subpart ZZZZ, may be subject to additional requirements under 40 CFR part 60, subparts IIII and JJJJ.

[b]For assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn/chief/

[c]**Note emergency engines have to comply with the definition of an emergency stationary RICE, which includes being operated per the requirements in 40 CFR 63.6640(f).**

Abbreviations:
CI-Compression Ignition
SI-Spark Ignition
4SLB-4 Stroke Lean Burn