

40 CFR part 63, subpart ZZZZ  
National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

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)
<b>Stationary RICE at Major Sources</b>													
<b>STEP 2(b)(i)</b>													
<b>New &amp; Reconstructed Stationary Engine ≤500 HP Located at Major Source of HAP</b>													
Limited Use	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CINSPS) or subpart JJJJ (SINSPS), as applicable.											
Emergency	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart IIII (CINSPS) or subpart JJJJ (SINSPS), as applicable.											
Non-Emergency CI	On or After 6/12/06	Engines are subject to 40 CFR part 60, subpart IIII (CINSPS)											
SI 4SLB <250 HP	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SINSPS)											
Non-Emergency SI 4SLB ≥250 HP	On or After 6/12/2006 and before 1/1/2008	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 (SINSPS)											
SI 4SRB	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SINSPS)											
Landfill/Digester Gas	On or After 6/12/2006	Engines are subject to 40 CFR part 60, subpart JJJJ (SINSPS)											
<b>STEP 2(b)(ii)</b>													
<b>New &amp; Reconstructed Stationary Engine &gt;500 HP Located at Major Source of HAP</b>													
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 63.6645(f))
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 Table 4 Table 5	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 Table 4 Table 5	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 Table 4 Table 5	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 Table 4 Table 5	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 an annual basis: 63.6625(c), (h)	No Requirements	63.6605	≥10 percent of the gross heat input on an annual basis: 63.6645(f)	≥10 percent of the gross heat input on an annual basis: 63.6655(c)	≥10 percent of the gross heat input on an annual basis: 63.6650(g)	No (except as specified in 63.6645(f))

\*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.

<sup>9</sup>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/ch03/index.html>, test data, or other published information.

\*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