## Summary of NESHAP 40 CFR Part 63 Subpart ZZZZ (incl. 03-09-11 FR amendments) Applicable Requirements for Existing Stationary Reciprocating Internal Combustion Engines (RICE) at Area Sources of HAP

| Engine Category | Date Constructed | Emission Limitations | Operating/ Maintenance Requirements | 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** | | | | | | | | | | | | |
| **Existing Stationary Engine ≤500 HP Located at Area Sources of HAP** | | | | | | | | | | | | |
| Emergency CI | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 4. | No Requirements | No Requirements | 63.6625(e), (f), (h), (i) | No Requirements | 63.6640(a)(b)(e) (f) Table 6,Item 9 | No Requirements | 63.6655(d)(e)(f) | No requirements | Yes |
| Non-Emergency CI 300<HP≤500 | Before 6/12/2006 | 63.6603(a) Table 2d, Item 2. | 66.6603 Table 2b | >300 HP with displacement <30 l/cyl: 63.6604 | 63.6612, 63.6615 63.6620, Table 4, Items 1&3 | 63.6625(e), (h), +(g) if ≥300 HP | 63.6630 Table 5, Items 12 &13 | 63.6640(a)(b)(e) | 63.6645 | 63.6655(a) | Footnote 2 of Table 2d | Yes |
| Non-Emergency CI ≤300 HP | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 1. | No Requirements | No Requirements | 63.6625(e), (h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d)(e) | No requirements | Yes |
| SI 4SLB | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 7. | No Requirements | No Requirements | 63.6625(e), (h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d)(e) | No requirements | Yes |
| SI 2SLB | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 6. | No Requirements | No Requirements | 63.6625(e), (h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d)(e) | No requirements | Yes |
| SI 4SRB | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 9. | No Requirements | No Requirements | 63.6625(e), (h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d)(e) | No requirements | Yes |
| Landfill/Digester Gas | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 11. | No Requirements | No Requirements | 63.6625(e), (h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d)(e) | No requirements | Yes |
| Residential/Commerical/Institutional Emergency | Before 6/12/2006 | No Requirements | | | | | | | | | | |
| **Existing Stationary Engine >500 HP Located at Area Sources of HAP** | | | | | | | | | | | | |
| Emergency CI | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 4. | No Requirements | No Requirements | 63.6625(e), (f), (h) | No Requirements | 63.6640(a)(b)(e) (f) Table 6,Item 9 | No Requirements | 63.6655(d)(e)(f) | Footnote 2 of Table 2d | Yes |
| Non-Emergency CI | Before 6/12/2006 | 63.6603(a) Table 2d, Item 3. | 63.6603 Table 2b | >300 HP with displacement <30 l/cyl: 63.6604 | 63.6612, 63.6615 63.6620 Table 4, Items 1&3 | 63.6625(g), (h) | 63.6630 Table 5, Items 1-6 | 63.6640(a)(b)(e) Table 6, Items 3, 10, 11, 12 or 13 | 63.6645 | 63.6655(a)(b)(d) | 63.6650(a)-(f) Table7, Item 1 | Yes |
| SI 4SLB | Before 6/12/2006 | 63.6603(a) Table 2d, Item 8. | 66.6603 Table 2b | No Requirements | 63.6612, 63.6615 63.6620, Table 4, Items 1&3 | 63.6625(h) | 63.6630 Table 5, Items 1-6 | 63.6640(a)(b)(e) Table 6, Items 3, 10, 11, 12 or 13 | 63.6645 | 63.6655(a)(b)(d) | 63.6650(a)-(f) Table7, Item 1 | Yes |
| SI 2SLB | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 6. | No Requirements | No Requirements | 63.6625(h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d) | No requirements | Yes |
| SI 4SRB | Before 6/12/2006 | 63.6603(a) Table 2d, Item 10. | 66.6603 Table 1b | No Requirements | 63.6612, 63.6615 63.6620, Table 4, Items 1&3 | 63.6625(h) | 63.6630 Table 5, Items 7-11 | 63.6640(a)(b)(e) Table 6, Items 10, 11, 12 or 13 | 63.6645 | 63.6655(a)(d) | 63.6650(a)-(f) Table7, Item 1 | Yes |
| Landfill/Digester Gas | Before 6/12/2006 | No Requirements | 63.6603(a) Table 2d, Item 11. | No Requirements | No Requirements | 63.6625(h) | No Requirements | 63.6640(a)(b)(e) Table 6, Item 9 | No Requirements | 63.6655(d) | No requirements | Yes |
| Residential/Commerical/Institutional Emergency | Before 6/12/2006 | No Requirements | | | | | | | | | | |

**Source**: Created by the DEP SW District Office based on US EPA Technology Transfer Network Air Toxics Website - NESHAP for Reciprocating Internal Combustion Engines *(Subpart ZZZ)* Implementation Information - 7/2/10 RICE Summary Table of Requirements, as revised by the DEP SW District to incorporate the 03/09/11 amendments to 40 CFR 63 Subpart ZZZZ.

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