

Continuous Compliance Checklist

Area Source Engines - 40 CFR Part 63, Subpart ZZZZ

This checklist was developed to assist owners and operators of stationary reciprocating internal combustion engines (RICE) located at area sources of HAP emissions with continuous compliance. Not sure whether your engine has met initial compliance requirements? Ask SBEAP at the contact information below.

Engine type: existing (commenced construction or reconstruction before 6/12/2006) compression ignition non-emergency, non-black start >500 HP	<input checked="" type="checkbox"/> yes
Requirements:	
(1) Comply with the applicable requirements in Table 2d and the operating limitations in Table 2b. [40 CFR 63.6603 (a)]	
(2) Non-emergency CI RICE with a site rating of >300 HP certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR Part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions. [40 CFR 63.6603 (e)]	
(3) Comply with the following requirements: [Table 2d to Subpart ZZZZ of Part 63]	
(a) Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or	
(b) Reduce CO emissions by 70 percent or more.	
(4) Use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. (40 CFR 63.6604)	
<i>If complying using an oxidation catalyst:</i>	
(5) Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and	
(6) Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.	
(7) Conduct performance tests every 8,760 hours or 5 years (if limited use— <i>operates less than 100 hours/year—engine</i>)/3 years (if not limited use engine), whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and	
(8) Collect the catalyst inlet temperature data according to §63.6625(b); and	
(9) Reduce these data to 4-hour rolling averages; and	
(10) Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and	
(11) Measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test.	
<i>If complying not using an oxidation catalyst:</i>	
(12) Comply with any operating limitations approved by the Administrator.	

(13)	Conduct performance tests every 8,760 hours or 5 years (if limited use— <i>operates less than 100 hours/year</i> —engine)/3 years (if not limited use engine), whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and	
(14)	Collect the approved operating parameter (if any) data according to §63.6625(b); and	
(15)	Reduce these data to 4-hour rolling averages; and	
(16)	Maintain the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.	
Continuous compliance (for reducing CO emissions or limiting CO in exhaust):		
<i>If using CEMS for compliance:</i>		
(17)	Collect the monitoring data according to §63.6625(a), reduce the measurements to 1-hr averages, calculate the percent reduction or concentration of CO emissions according to §63.6620; and	
(18)	Demonstrate that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and	
(19)	Conduct an annual relative accuracy test audit (RATA) of your CEMS.	
<i>If using CPMS for compliance:</i>		
(20)	Operate and maintain according to the procedures in your site-specific monitoring plan; conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually .	
Reporting:**		
(21)	Submit each applicable report in Table 7, by the date in Table 7, unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), and according to 40 CFR 63.6650(b)(1)-(b)(9). [40 CFR 63.6650(a)-(b)] Sources with Title V operating permits may submit a written request to the Administrator for the semi-annual and annual reporting dates align with reporting dates in the Title V operating permit.	
<i>Semiannual compliance reports cover the period January 1 through June 30 – due July 31 and cover July 1 through December 31 – due January 31.</i>		
<i>Annual compliance reports cover the period January 1 through December 31 – due January 31.</i>		
<i>A Kansas reporting form is available at www.sbeap.org/aqrules/engines under 4Z tools and forms.</i>		
(22)	If no deviations and no periods during which CEMS or CPMS was out-of-control, and	
	(a) if limited use (<i>operates less than 100 hours/year</i>) engine – report annually; or	
	(b) if not limited use engine – report semiannually .	
(23)	If had a deviation (<i>instance when emission limit or operation limit was not met</i>) or periods during which CEMS or CPMS was out-of-control – report semiannually .	
(24)	If had a malfunction (<i>sudden, infrequent, and not reasonably preventable failure of equipment, or a process to operate in a normal or usual manner</i>) – report semiannually .	
(25)	The Compliance report must contain the information: [40 CFR 63.6650(c)(1)-(6)] a. Company Name and Address b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. c. Date of report and beginning and ending dates of the reporting period. d. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be	

<p>exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.</p> <p>e. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.</p> <p>f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.</p>	
<p>(26) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in §63.6650 (c)(1) through (4) of and the information in §63.6650 (d)(1) and (2) of this section. [40 CFR 63.6650(d)(1)-(2)]</p> <p>a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.</p> <p>b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.</p>	
<p>(27) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in 63.6650(c)(1) through (4) and (e)(1) through (12) of this section. [40 CFR 63.6650(e)(1)-(12)]</p> <p>a. The date and time that each malfunction started and stopped.</p> <p>b. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.</p> <p>c. The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).</p> <p>d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.</p> <p>e. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.</p> <p>f. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.</p> <p>g. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.</p> <p>h. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.</p> <p>i. A brief description of the stationary RICE.</p> <p>j. A brief description of the CMS.</p> <p>k. The date of the latest CMS certification or audit.</p> <p>l. A description of any changes in CMS, processes, or controls since the last reporting period.</p>	
<p>(28) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.6650(f)]</p>	
<p>Records to keep:</p>	

(29) Engine complies with emission and operating limitations: [40 CFR 63.6655(a)(1-5)]	
(30) A copy of each notification and report that you submitted, including the Initial Notification of Compliance or Notification of Compliance Status	
(a) Records of the occurrence and duration of each malfunction of operation or air pollution control device and monitoring equipment,	
(b) Records of performance tests and evaluations as required	
(c) Records of all required maintenance performed on the air pollution control and monitoring equipment, and	
(d) Records of actions taken during periods of malfunction, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	
(31) Engine complies with emission and operating limits with a CEMS or CPMS: [40 CFR 63.6655(b)(1-3)]	
(a) Records described in 40 33.10(b)(2)(vi) through (xi)	
(b) Previous (<i>i.e.</i> , superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3)	
(c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.	
(32) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you. [40 CFR 63.6655(d)]	
(33) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan [40 CFR 63.6655(e)(3)]	
<i>Keep records readily accessible in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [Table 8, 40 CFR 63.6660].</i>	

*The Continuous Compliance Checklist is intended as guidance, if a conflict exist between the regulation 40 CFR Part 63, Subpart ZZZZ and this checklist the regulation shall take precedence.

** Notification of Compliance Status and Annual/Semiannual Reporting Forms available at <https://www.sbeap.org/aqrules/engines>

Questions? Call SBEAP at 1-800-578-8898 or email at sbeap@ksu.edu.

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