

Environmental Protection Agency

§ 63.2161

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§ 63.2160 By what date must I conduct an initial compliance demonstration?

(a) For each emission limitation in Table 1 to this subpart for which compliance is demonstrated by monitoring fermenter exhaust, you must demonstrate initial compliance for the period ending on the last day of the month that is 12 calendar months (or 11 calendar months, if the compliance date for your source is the first day of the month) after the compliance date that is specified for your source in § 63.2133. (For example, if the compliance date is October 15, 2003, the first 12-month period for which you must demonstrate compliance would be October 15, 2003 through October 31, 2004.)

(b) For each emission limitation in Table 1 to this subpart for which initial compliance is demonstrated by monitoring brew ethanol concentration and calculating volatile organic compound (VOC) concentration in the fermenter exhaust according to the procedures in § 63.2161, you must demonstrate initial compliance within 180 calendar days before the compliance date that is specified for your source in § 63.2133.

§ 63.2161 What performance tests and other procedures must I use if I monitor brew ethanol?

(a) You must conduct each performance test in Table 2 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in § 63.7(e)(1) and under the specific conditions that this subpart specifies in Table 2 to this subpart and in paragraphs (b)(1) through (4) of this section.

(1) Conduct each performance test simultaneously with brew ethanol monitoring to establish a brew-to-exhaust correlation equation as specified in paragraph (f) of this section.

(2) For each fermentation stage, conduct one run of the EPA Test Method 25A of 40 CFR part 60, appendix A, over the entire length of a batch. The three fermentation stages do not have to be from the same production run.

(3) Do the test at a point in the exhaust-gas stream before you inject any dilution air, which is any air not needed to control fermentation.

(4) Record the results of the test for each fermentation stage.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) You must collect data to correlate the brew ethanol concentration measured by the continuous emission monitoring system (CEMS) to the VOC concentration in the fermenter exhaust according to paragraphs (d)(1) through (3) of this section.

(1) You must collect a separate set of brew ethanol concentration data for each fed-batch fermentation stage while manufacturing the product that comprises the largest percentage (by mass) of average annual production.

(2) Measure brew ethanol as specified in § 63.2164 simultaneously with conducting a performance test for VOC in fermenter exhaust as specified in paragraph (b) of this section. You must measure brew ethanol at least once during each successive 30-minute period over the entire period of the performance test for VOC in fermenter exhaust.

(3) Keep a record of the brew ethanol concentration data for each fermentation stage over the period of EPA Test Method 25A of 40 CFR part 60, appendix A, performance test when the VOC concentration in the fermenter exhaust does not exceed the applicable emission limitation in Table 1 to this subpart.

(e) For each set of data that you collected under paragraph (d) of this section, perform a linear regression of brew ethanol concentration (percent) on VOC fermenter exhaust concentration (parts per million by volume (ppmv) measured as propane). The correlation between the brew ethanol concentration as measured by the CEMS and the VOC fermenter exhaust concentration as measured by EPA Test Method 25A of 40 CFR part 60, appendix A, must be linear with a correlation coefficient of at least 0.90.

(f) Calculate the VOC concentration in the fermenter exhaust using the