PART 283
GENERAL PROCEDURES FOR EMISSIONS TESTS AVERAGING

SUBPART A: INTRODUCTION

Section 283.110 Purpose
The purpose of this Part is to establish the general procedures and conditions for emissions tests averaging.

Section 283.120 Applicability
For the purpose of determining the compliance of an emission unit with an applicable limitation, standard, or permit conditions, unless otherwise specified by 35 Ill. Adm. Code Subtitle B, the arithmetic average of at least three valid test runs may be used, subject to the limitations and conditions contained in this Part. The emissions tests averaging procedure set forth in this Part may not be used for determining the compliance status of the following types of emission units:

a) Emission units that are subject to the testing requirements set forth in Section 111 of the Clean Air Act, 42 USC 7401, Section 112 of the Clean Air Act, 42 USC 7402, or the regulations promulgated under those statutes; or

b) Emission units that are being tested for emissions generated by any of the following types of waste: hazardous waste, as defined by Section
3.15 of the Illinois Environmental Protection Act [415 ILCS 5/3.15], or municipal waste, as defined by Section 3.21 of the Illinois Environmental Protection Act [415 ILCS 5/3.21].

Section 283.130 Definitions

Unless otherwise defined in this Section or unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall have the meanings specified by 35 Ill. Adm. Code 201.102 and 35 Ill. Adm. Code 211.

“Agency” means the Illinois Environmental Protection Agency.

“Continuous steady-state unit” means an emission unit that, as an inherent result of its design or operation, produces a steady-state emissions stream.

“Cyclic steady-state unit” means an emission unit that operates on a batch basis and that exhibits uniform operating parameters and produces similar emissions from batch to batch, and has a batch cycle time such that it is practical to perform a single test run during one or more whole batch cycles.

“Minor deviation” means a change to a test plan that does not affect the stringency of the emission limitation or standard (i.e., no emission limit or standard relaxation); and has no national significance (i.e., the change will not affect the applicable regulation’s implementation for other sources in the affected category); and is site-specific (the applicability of the change is determined only for the source at issue). A minor deviation includes, but is not limited to, the following: a modified sampling traverse (the procedure of measuring gas velocity at specific points across the cross sectional area of a stack for the purpose of determining the gas velocity profile) or location to avoid interference from an obstruction in the stack; increasing the sampling time or volume; use of additional impingers for a high moisture situation; accepting particulate emission results for a test run that was conducted with a lower than specified temperature; substitution of a material in the sampling train that has been demonstrated to be more inert for the sampling matrix; and changes in recovery and analytical techniques such as a change in quality control/quality assurance requirements needed to adjust for analysis of a certain sample matrix.

“Qualifying unit” means an emission unit that during normal operating conditions produces a consistent pattern of emissions.

“Valid test run” means a completed test run, conducted in accordance with a test plan submitted to the Agency, as required under Section 283.220 of this Part, or a test plan modified in accordance with Section 283.230 of this Part.

SUBPART B: PROCEDURES FOR AVERAGING OF TEST RESULTS
Section 283.210  Criteria for Averaging Tests

Emissions tests results for an emission unit shall be averaged to determine compliance with the applicable limitation, standard, or permit conditions, provided that all of the following conditions are met:

a) The emission unit is classified as a continuous steady-state unit, a cyclic steady-state unit, or another qualifying unit;

b) At least three valid test runs are conducted, subject, however, to the provisions of Section 283.240(c) of this Part; and

c) Each of the test runs to be averaged is performed according to the test plan submitted to the Agency prior to the test, pursuant to the provisions of Section 283.220 of this Part, or as may otherwise be modified and approved, according to the provisions of Section 283.230 of this Part.

Section 283.220  Test Plan Requirements

a) A test plan must be submitted to the Agency when an owner or operator of an emission unit intends to average emissions tests results for that unit.

b) A test plan must be submitted to the Agency for review prior to conducting any emissions test when any one of the following applies:

1) The Agency makes a written request for a test plan;

2) A non-standard test method or procedure is to be used;

3) A source seeks to test at operating parameters that differ from the maximum parameters specified in its operating permit;

4) A source seeks to deviate from a prior test plan for that emission unit; or

5) A test plan for the emission unit is required to be submitted by an Illinois Pollution Control Board Order, any court order, consent decree, Compliance Commitment Agreement, or permit provision.

c) A test plan must specify:

1) The purpose of the test;

2) The operating parameters;

3) The test methods; and
4) Any other procedures that will be followed when conducting an emissions test pursuant to the provisions of this Part.

d) Notwithstanding subsections (a), (b), and (c) above, a test plan need not be submitted under the following circumstances:

1) Where the source intends to utilize a test plan previously submitted to the Agency. However, the source must submit a notice containing the following:

   A) The purpose of the test;

   B) Date the previously submitted test plan was submitted to the Agency; and

   C) A statement that the source is relying on a previously submitted test plan.

2) Where the source intends to use a standard test method or procedure. However, the source must submit a notice containing the following:

   A) The purpose of the test; and

   B) The standard test method or procedure to be used.

e) The Agency is not required to review and approve or disapprove a test plan prior to the owner or operator of an emission unit conducting an emissions test.

Section 283.230 Changes to the Test Plan

a) The owner or operator of an emission unit, or an authorized representative, may change the procedures, methods, or operating parameters of the emissions test at the time of the emissions test, provided that the change is a minor deviation as defined in Section 283.130 of this Part. The emission unit owner or operator shall ensure that documentation of the change is submitted to the Agency along with the test results.

b) If the owner or operator of an emission unit elects to use the provisions of subsection (a) of this Section, the following procedures shall apply, depending on the relevant circumstances:

1) If a representative of the Agency is on-site for the purpose of witnessing the emissions test, the owner or operator of the emission unit or an authorized representative may request permission from the Agency’s representative to change the procedures, methods, or operating parameters of the emissions test as specified in the test plan, submitted pursuant to the
provisions of Section 283.220 of this Part, provided that the change is a minor deviation, as defined in Section 283.130 of this Part.

A) If the Agency representative approves the minor deviation, all test runs performed with this minor deviation may not be deemed invalid test runs by the Agency on the sole basis of the minor deviation.

B) If the Agency representative disapproves the change to the procedures, methods, or operating parameters of the emissions test as specified in the test plan, then the owner or operator of the emission unit or an authorized representative may elect to perform the emissions test with the change. However, the Agency may subsequently disapprove the emissions test results if it finds that a valid test run was not obtained as a result of the change.

2) If an Agency representative is not on-site for the purpose of witnessing the emissions test, the owner or operator of the emission unit or an authorized representative may elect to change the procedures, methods, or operating parameters of the emissions test as specified in the test plan, provided the change is a minor deviation, as defined in Section 283.130 of this Part. However, the Agency may disapprove the emissions test results if it finds that a valid test run was not obtained as a result of the change.

Section 283.240 Averaging Procedure

The following procedure shall be used when averaging emissions tests results:

a) The average of the emissions tests results shall be determined by the arithmetic average of three valid test run results, as long as the test runs are conducted in conformance with either the provisions of an approved test plan or with a test plan that has been modified in accordance with Section 283.230 of this Part.

b) Notwithstanding subsection (a) of this Section, if the owner or operator of an emission unit elects to perform more than three test runs, then the average shall be calculated based upon the results of all valid test runs.

c) Notwithstanding subsection (a), in the event that a sample is accidentally lost or conditions occur in which one of the test runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, malfunction or other dissimilar or non-representative circumstances, upon the owner’s or operator’s documentation of the existence of any of the circumstances set forth in this subsection (c) and verification by the Agency that the conditions existed, compliance may be determined by
using the arithmetic average of the test results of all remaining valid test runs; however, a minimum of two valid test runs is required to determine compliance.

Section 283.250 Compliance Determination

a) An emission unit will be determined to be in compliance with the applicable limitation, standard, or permit conditions when the average of the test results is either at or below the emission limit, standard, or permit conditions, and the test plan for the emission unit, submitted in accordance with Section 283.220 of this Part or as modified in accordance with Section 283.230 of this Part, has not been disapproved by the Agency.

b) If an owner or operator of an emission unit does not meet the criteria for averaging under Section 283.240 of this Part, then each individual valid test run shall be required to meet the applicable limitation, standard, or permit conditions in order to demonstrate compliance.