	<b>Air Quality Division POLICY AND PROCEDURE</b>		DEPARTMENT OF ENVIRONMENTAL QUALITY
Original Effective Date: February 26, 2004  Revised Date: Reformatted Date: February 20, 2013	Subject: Averaging Times and Compliance Testing		Category: <input type="checkbox"/> Internal/Administrative <input checked="" type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive
Program Name: Air Compliance (stack) Testing			
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*A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.*

**ISSUE:**

In the past few years, the Renewable Operating (RO) and the New Source Review (NSR) permits have been issued with varying emission limit averaging times (e.g., 1, 3, 8, or 24-hour, monthly, and annual averages). The 3, 8, or 24-hour averaging times are generally requested by the permittee in cases where it is necessary to smooth out short-term fluctuations in process emissions. A few permittees with emission limits with short-term averaging times ranging from 3 to 24 hours have requested approval to conduct stack tests with sample run times shorter than their averaging times.

The purpose of this Policy and Procedure is to provide permittees and staff of the Department of Environmental Quality (DEQ), Air Quality Division (AQD) with options and guidance in dealing with compliance testing requirements when permits contain averaging times of 24 hours or less.

**STAKEHOLDER INVOLVEMENT:**

The Policy and Procedure was developed through a stake holder process in 2004 and was reviewed and reaffirmed by the Air Advisory Council on October 31, 2012.

**POLICY:**

Rule 336.1213(3) [Rule 213(3)], promulgated pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), requires that sufficient testing be conducted to determine the status of compliance of the stationary source with the emission limitations. The DEQ interprets this to mean that, except as otherwise authorized by the DEQ, the duration of a stack test must be the same as the averaging time of the limit in order to be a valid test to determine the compliance status of the emission unit. Rule 336.2003(2) [Rule 1003(2)] requires the AQD to use the arithmetic mean of results of 3 samples to determine compliance. For example, a stack test would normally need to consist of three 8-hour runs for an emission limit that contains an 8-hour averaging time.

Michigan Rule 213(3) states the following:

The renewable operating permit shall contain terms and conditions necessary to ensure that sufficient testing, monitoring, recordkeeping, reporting, and compliance evaluation activities will be conducted to determine the status of

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compliance of the stationary source with the emission limitations and standards contained in the renewable operating permit.

A portion of Michigan Rule 1003(2) states the following:

A performance test shall consist of a minimum of 3 separate samples of a specific air contaminant conducted within a 36-hour period, unless otherwise authorized by the department. Each of the 3 separate samples shall be obtained while the source is operating at a similar production level. For the purpose of determining compliance with an applicable emission limit, rule, or permit condition, the arithmetic mean of results of the 3 samples shall apply.

**PROCEDURES:**

To comply with Rules 213(3) and 1003(2), the DEQ normally requires that compliance testing must be conducted in such a manner that the duration of sample collection matches the averaging time included in permits as part of the emission limitations and standards. Therefore any compliance test plan submitted to the DEQ must be reviewed to insure that sample run durations match averaging times. For example, if the permit contains a 1-hour averaging time, the test plan must provide for the collection of three 1-hour samples.

Current guidance requires that compliance test plans be submitted to both the district office and the AQD Technical Programs Unit (TPU). The TPU is responsible for determining whether test plans include approvable sampling and analytical methodologies, quality assurance procedures for sample collection and analysis, and sample collection points. The district staff reviews the test plan to confirm that the facility will be operated in a manner during the stack test that meets the operational requirements and production levels required by the permit.

Unless a source is using Option 4 below or the sample time and compliance averaging time are specified in a federal New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP) (including the Part 61 NESHAP and Part 63 Maximum Achievable Control Technology NESHAP), a test plan in which the duration of sample collection does not match the averaging time specified in the permit can not be approved. The TPU staff should notify the permittee that the test plan is inadequate and that the following options are available: 1) submit a permit modification request to have the averaging time reduced; 2) submit a permit modification request to have the compliance monitoring plan changed from stack testing to the use of a Continuous Emission Monitoring System (CEMS); 3) submit a revised test plan in which the duration of sample collection matches the averaging time; or 4) certify that the results of a shorter duration test will be used to represent the entire averaging time.

Option 1: The permittee may submit a permit modification request to reduce the emission limit averaging time. This modification request must be submitted to the district office for the RO permits or to the AQD Permit Section for NSR permits. These modification requests should be processed according to existing permit modification policy/procedures. However, to facilitate timely compliance testing, receipt of the permit modification request will be sufficient for the AQD staff to complete review and approval of the test plan.

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Option 2: The permittee may submit a permit modification request to retain the longer averaging times and provide continuous compliance emissions data. This option may also allow for the reduction of some of the other periodic monitoring, recordkeeping, and reporting requirements since the use of CEMS is generally considered to be the best compliance monitoring method.

Option 3: The TPU staff will need to determine if the revised test plan with sampling durations matching averaging times contains a sample collection methodology that is acceptable for these extended sampling run durations. If not, then multiple sampling trains may need to be utilized during each sample run.

If operational and sample collection criteria can be met, the revised test plan can be approved and the compliance testing may proceed. Approval will also be granted to exceed the 36-hour sampling requirement of Rule 1003(2) if it is necessary to conduct a proper stack test.

Option 4: The responsible official would be required to acknowledge, in writing, that: 1) the test protocol includes the use of a sample collection duration that is shorter than the averaging time specified in the emission limitations; 2) by requesting approval of the test protocol, the responsible official/permittee agrees that the test results are adequate to determine compliance or noncompliance with permit limitations; and 3) the shorter sample duration will result in the collection of emissions representative of the facility's maximum routine operating conditions and/or other operational requirements specified in the permit.

The permit would not be modified under this option, thus providing the facility with the flexibility to increase the sample collection duration for future compliance testing.

Many permittees may choose to utilize the procedure described in Options 1 or 4 since they reduce costs associated with the compliance testing (e.g., reduced time/staff on site, reduced equipment requirements, reduced potential for bad sample runs, and potentially reduced analytical costs) and reduce the timeframe that the emission unit had to be operating at "maximum routine operating conditions."

The AQD will expedite the processing of any applications for permit modifications received under Options 1 or 2. These permit modifications are considered minor revisions that can be processed quickly by the NSR or RO permit programs.

This Policy and Procedure does not address the following:

- A. Compliance tests associated with long-term averaging times such as monthly or annual.
- B. Compliance tests for coating lines or other processes that primarily utilize mass balance and recordkeeping as the compliance determination method.
- C. Capture, destruction, control or transfer efficiency tests.
- D. Compliance tests to demonstrate compliance with a federal NSPS or NESHAP standard where the standard contains specific testing requirements including sampling duration.

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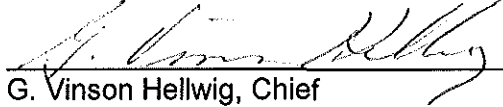
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This Policy and Procedure is intended to provide guidance to the AQD staff to foster consistent application of Part 55 of the NREPA and the administrative rules promulgated thereunder. This document is not intended to convey any rights to any parties nor create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

Questions regarding this Policy and Procedure should be directed to the AQD Technical Programs Unit in Lansing or the AQD District Offices.

Step	Who	Does What
1.	AQD Technical Programs Unit	Negotiates test plan approval letter with the facility and their test consultant.

DIVISION CHIEF APPROVAL:

  
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G. Vinson Hellwig, Chief