

identified in IEPA's testimony. Thus, averaging three test runs is needed to improve the confidence level of the conclusion that the source is operating in or out of compliance.

Illinois' rules provide additional safeguards against finding compliance on average for a source that is moving in and out of compliance. These safeguards are based on restrictions that three run averaging is permissible only for sources with steady state emissions.

Comment: The commenters are concerned in particular that variations in emissions can arise from variations in source operations. The commenters observe that "[i]t is not possible to define every operating parameter in the testing plan." As a result, the commenters conclude that the rule does not prevent facilities from either intentionally or unintentionally varying operations so that excessive emissions in one test run do not recur in the next test runs.

Response: Testing plans are generally designed with the most important operating parameters set to have maximum emissions. If variation of parameters not addressed in the testing plan were found to affect emissions significantly, this could signify that the test results do not truly assess whether the facility complies with the limit under the normal range of routine operating conditions. If so, an additional test may be required. However, in most cases, variations in results among test runs can be attributed largely to testing variability, such that the test provides a valid indication of whether the facility complies with the limit in routine operation.

Comment: The commenters object that "insufficient information is included regarding the test plans for the commenters to determine whether * * * testing in accordance with a valid test plan will assure the reliability of emission test averaging."

Response: Due to the variety of facilities to be tested, it is not possible for a testing rule to specify the parameters that would be necessary to address for every situation. Therefore, it is essential that a process be established by which the State, with EPA oversight, can evaluate each testing plan individually. EPA believes that the State's rule provides for proper governmental review of each testing plan on a case-by-case basis.

Comment: The commenters express concern about provisions for "minor deviations" from submitted test plans. In particular, the commenters state that the absence of a definition of the operating parameters in test plans results in insufficient guarantees against

changes in critical parameters between test runs.

Response: The range of circumstances requiring minor deviations from planned testing procedures is as wide as the range of relevant operating parameters. Furthermore, the minor deviations authorized here generally apply to the entire set of test runs, typically to address site-specific circumstances where the state finds that the full test may be run under conditions deviating slightly from the planned conditions without affecting the results of the test. An example of a minor deviation would be an incinerator that is operating slightly cooler than was anticipated in the test plan, in circumstances where the alternate temperature does not significantly affect emissions. For the range of facilities covered by this general testing rule, the need for minor deviations from standard testing methods is inevitable, and yet the range of necessary deviations cannot be predicted or readily defined. The need for government concurrence with the minor deviation is a safeguard against deviations pursued to underrepresent emissions. Thus, Illinois has adopted a reasonable approach to addressing site-specific circumstances where minor modifications of testing procedures are appropriate.

Comment: The commenters believe that variations in results among test runs should not be assumed to reflect imprecision in test results. The commenters observe that variations in operating parameters as well as plant equipment and malfunctions are just as likely as variations resulting from test imprecision.

Response: Illinois reviews test reports to assess whether circumstances arose during the test that would significantly affect emissions. Tests done during a facility malfunction or during other abnormal operations significantly affecting emissions would generally not be in accordance with the test plan, and the test would not be considered a valid test. In most cases, it is reasonable to attribute most of the variations among results among three test runs to testing uncertainties.

Comment: The commenters express concern that facilities, who get "benefit of the assumption * * * of imprecise testing methods" are "also responsible for maintaining the testing equipment and conducting the test."

Response: The comment seems intended to imply a concern that the facility operators have an incentive to maintain the testing equipment poorly and conduct the test imprecisely. In fact, most tests are done by contractors, whose livelihoods depend on

conducting tests as reliably as possible. Even for facility-run tests, greater imprecision does not benefit the facility, since imprecision does not preferentially lead to a lower average emission value. On the contrary, greater imprecision increases the risk that a complying facility could have three test runs with average emissions above the applicable limit.

Comment: The commenters recommend alternatives to averaging of three test runs. The commenters recommend that more than three test runs be conducted. The commenters further recommend that the State (and EPA) be granted the discretion to evaluate test results "with outliers examined on a case by case basis to determine if they were a violation in fact or if it was a failure of testing methods." The commenters also suggest the possibility of conducting multiple tests with different testing equipment and the possibility of operators "running the facility with emissions further within the limits".

Response: Illinois' rule seeks to establish standard practice for conducting and evaluating tests. Illinois makes the recommended choice in stipulating that mass emission tests shall generally consist of three test runs. Illinois further applies standard, recommended practice by averaging the results of the test runs, thereby improving the reliability of the conclusions drawn. Illinois (and EPA) retain the option to require further tests if variability in test results or other factors indicate that the conducted test does not adequately assess whether the facility complies with applicable limits under all operating conditions. It would be inappropriate for Illinois to require use of multiple sets of testing equipment on a routine basis or to require facilities to emit below the applicable limit by an amount that reflects testing uncertainties.

The discretion that the commenters recommend, for examining outliers on a case by case basis, is in fact granted in the rule. In examining test results, Illinois (and EPA) examine the variability from run to run and assess whether operating conditions were held constant. If Illinois (or EPA) concludes that operating conditions varied, causing significant variations in emissions, the rules provide for a conclusion that the facility did not have steady state emissions and therefore did not qualify for averaging of three test runs. More generally, if Illinois (or EPA) simply concludes that the variations exceed those attributable to normal testing uncertainties, Illinois (or EPA) may find that the test is unreliable and