

and concentrations of precursors, temperature, and process conditions. Dioxins are formed in acid gases leaving the combustion device, and the means of control is not necessarily the particulate control system but quenching of gases to control the temperature in the device (to assure that temperature does not fall in the range which optimizes dioxin/furan formation).

The MACT control system for dioxin/furans is the entire scrubber train—the packed tower scrubbers (for HCl control) and the venturi scrubber (for PM control)—and not just the PM control device. That is, the control of dioxin/furans includes the rapid cooling of the exhaust gas that occurs in the packed tower absorbers, which limits the dioxin/furan formation. Therefore, we believe a dioxin/furan limit is necessary to ensure that process and control device operations do not change in the future in a manner that might increase the formation and release of dioxin/furan, even if the overall PM control level remains the same.

The dioxin/furan emission limit is not based on a determination that health risks exist; it is based on technology and the floor level of control that has been achieved. Stack testing every 2.5 years is not costly or unreasonable to provide assurance that the dioxin/furan limit is being achieved. Moreover, the commenter did not provide any information as to how this stack testing will add significantly to the costs of compliance with the final NESHAP.

Comment: The commenter disagreed with the approach used to set the emission limit for dioxin/furan and claimed it does not provide a reasonable margin of safety to ensure continuous compliance. The commenter suggests that a limit of 50 ng TEQ/dscm is statistically valid. However, the commenter recommended that a minimum safety factor of three be applied to the average of results from the two stack tests (21.5 ng TEQ/dscm) to develop a limit of 65 ng TEQ/dscm rather than a limit of 36 ng TEQ/dscm as proposed. The commenter stated this is reasonable because of the high variability in the test results and because of the inherent inaccuracies in the dioxin/furan sampling and analysis, especially at these extremely low levels of detection.

Response: We chose 36 ng TEQ/dscm because it was the highest result from any of the six runs. This approach accounts for inherent variability, and an additional margin of safety is provided by determining compliance from the average of three runs. The commenter estimated the 99th percentile for single

test runs. The variability of the average of three runs is more appropriate than the variability of a single test run because compliance is determined from the average of three test runs rather than for each single test run.

To illustrate the impact of using the average of three runs, we performed a Monte Carlo simulation of 5,000 runs based on a normal distribution developed from the test results for six runs. From the simulation, the 99th percentile for individual runs was 44 ng TEQ/dscm compared to a 99th percentile of 32 ng TEQ/dscm for the average of three runs. Consequently, since the emission limit is enforced based on three-run averages, the proposed limit of 36 ng TEQ/dscm is close to the 99th percentile of performance. We believe that the limit as proposed (and included in the final rule) is achievable, and the simulation indicates it accounts for variability.

The commenter mentioned process variability and uncertainty associated with sampling and analysis as reasons for a higher limit. However, the variability in the process, sampling, and analysis are inherently included in the runs we used to derive the limit and using the highest run accommodates this variability. In addition, there is no need to artificially increase the limit by multiplying the average of the test results by three because the statistical simulation shows that the proposed limit is reasonable. With testing performed every 2.5 years and a limit at about the 99th percentile, the limit would be exceeded no more than once every 250 years if the process and control device are operated as they were during the two performance tests.

While we were evaluating the data discussed by the commenter, we discovered an error in the 1998 test report. The test contractor inadvertently switched the TEF for two congeners. The net effect is that the overall average for six runs is 18 ng TEQ/dscm instead of 21.5 ng TEQ/dscm. This correction had no effect on the highest run and did not change the limit that was originally proposed.

Comment: The commenter stated that the World Health Organization's 1998 TEF scheme should be used to assign toxic equivalency, and this scheme should be stated in the final rule.

Response: Based on our dioxin reassessment report, we agree with the commenter and have incorporated the updated TEF scheme in the final rule. The effect on the test results was small, and the highest run remained at 36 ng TEQ/dscm. Consequently, the level of the final standard remains as proposed.

IV. Summary of Environmental, Energy and Economic Impacts

Generally, we do not expect the impacts of the final rule to be very significant. Currently, the one operating primary magnesium plant has all of the required air pollution control equipment in place and operating. The only impacts will be the estimated cost of \$43,000 for the additional monitoring, recordkeeping and reporting requirements required by the final rule.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is “significant” and, therefore, subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines a “significant regulatory action” as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that the final rule is not a “significant regulatory action” under the terms of Executive Order 12866, and is therefore not subject to OMB review.

B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* (ICR 2098.02). The information collection requirements are not enforceable until OMB approves them.

The information requirements in the final rule are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators