UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

June 17, 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Henry V. Nickel
Mr. William L. Wehrum
Hunton & Williams
1900 K Street, NW
Washington, D.C. 20006-1109

Re: Clarification of 40 CFR Part 63, Subpart LL Requirements Applicable to Potlines During Startup Periods

You have asked that the U.S. Environmental Protection Agency (EPA) evaluate the regulatory requirements applicable to potlines at primary aluminum reduction plants during startup under 40 CFR part 63, subpart LL, and that EPA determine whether compliance with the emission limits for potlines set forth at 40 CFR 63.843(a) is required during the potline startup period. Based on our evaluation, we have determined that compliance with these emissions limits is not required during the startup period before performance testing is conducted, which can be up to 180 days in duration. As is explained below, this determination reflects the unique circumstances presented by potline startup at primary aluminum reduction plants and accounts for the regulatory and preamble language of subpart LL.[1]

Our interpretation of 40 CFR part 63, subpart LL's requirements is informed, in part, by the regulatory history associated with amendments to subpart LL that were adopted to accommodate the unique characteristics of the potline startup process. EPA amended the subpart LL rules in 2005 to provide for a 180-day startup period for new potlines and for existing potlines that had been shut down and subsequently restarted. The preamble to the proposed rule amendments reflects EPA's understanding of the difficulties associated with compliance during potline startup:

> Aluminum potlines are unique emission sources in the sense that the affected source consists of numerous (100 to 150 or more) smelting cells.

[1] This letter sets forth EPA's interpretations of the legally-binding requirements contained in EPA regulations, but is not itself binding. This letter does not substitute for those regulations, nor is it a regulation itself. This letter sets forth EPA's interpretation of regulatory requirements. Interested parties will be free to raise questions about the applicability of the interpretations to a particular situation and EPA will consider whether the application of the interpretations in the particular situation is appropriate at that time. Any decision applying any of these interpretations will be made based on the applicable statute and regulations.

> At the beginning of startup, a small number of cells are charged with raw materials. When they become functional, they provide a molten liquid bath that is used to start up additional cells. All of the cells cannot be started and stabilized simultaneously because the electrolytic chemical process requires a stable equilibrium between the molten bath and cell operating temperatures. Until equilibrium is achieved, the emission rates from the potline are not representative of normal operation. For these reasons, the startup, stabilization, and testing of an existing potline after a long-term shutdown may require as long as 6 months to complete.

68 FR 12645, 12649 (March 17, 2003).

Our determination that compliance with potline emission limits is not required during a startup period of up to 180 days is also informed by the equations used to calculate emissions rates for potlines and the nature of the performance testing requirements. The equations that are used to determine emission rates for potlines are set forth at 40 CFR 63.847(e)(1) and (e)(2). Production rate (P) is one of the variables in those equations. The regulations provide that the production rate (P) is to be determined "by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test." (40 CFR 63.847(e)(6)). Thus, the production rate is determined based on three runs of a performance test during the calendar month. At the same time, the performance testing requirements applicable to potlines provide that a facility has up to 180 days from the time that the first pot in a potline or potroom group is energized to conduct a performance test.[2]

The combination of an emission rate equation for potlines that is dependant on data from three runs of a performance test during a calendar month and the allowance for 180 days from initial startup to conduct performance tests, in effect, creates an exception to the obligation to comply with potline emission limits during periods of process startup for up to 180 days from the time that the first pot in a potline or potroom group is energized.[3]

In conclusion, in light of the considerations discussed above, EPA's view is that compliance with 40 CFR part 63, subpart LL emission limits for potlines set forth at 40 CFR 63.843(a) is not required during the potline startup period, which can be up to 180 days in duration. Of course, this view does not change the general duty of each source within subpart LL to minimize emissions during potline startup. As EPA explained in the preamble to

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[2] Subpart LL performance testing requirements for potlines requires a performance test "by the 180th day following startup for a potline or potroom group" and specifies that "[t]he 180 day period starts when the first pot in a potline or potroom group is energized." (40 CFR 63.847(c)(2)(i) and (3)(i)).

[3] Compliance is required as soon as the source achieves normal operations and conducts performance testing. If this occurs in less than 180 days following startup, the source must comply at such time. In addition, failure to conduct a performance test by the end of the 180-day period would be a violation of subpart LL.

the proposed rule amendments discussed above, "[d]uring startup, the plant must meet all of the EPA requirements for maintaining control equipment and minimizing emissions as much as possible during the startup period." 68 FR 12645, 12649 (March 17, 2003). This general duty requires reduction in emissions "to the greatest extent which is consistent with safety and good air pollution control practices. 40 CFR 63.6(e)(1)(i).

This letter will be posted to EPA's website at www://epa.gov/compliance/civil/caa/html. If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Penny Lassiter

for Peter Tsirigotis
Director
Sector Policies and Programs Division