UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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JUL 29 2016

OFFICE OF
AIR AND WASTE

Mr. Joe Westersund
Oregon Department of
Environmental Quality
DEQ Headquarters Office
811 SW 6th Avenue
Portland, Oregon 97204-1390

Dear Mr. Westersund:

The U.S. Environmental Protection Agency has reviewed the Art Glass Permanent Rulemaking 2016 amendments to chapter 340 of the Oregon Administrative Rules. We respectfully offer the following technical comments to the Oregon Department of Environmental Quality for consideration in development of the final art glass permanent rule.

Section 340-244-9070(1)

We recommend that ODEQ consider changing the form of the emission limit for furnaces controlled by a baghouse from the current requirement of 99.0% control efficiency to an outlet grain loading standard of 0.005 gr/dscf. A grain loading standard is a measure of the mass of filterable particulate matter per volume of exhaust gas. The standard units are grains of filterable particulate matter per dry standard cubic foot of exhaust gas. A grain is defined as 1/7000 of a pound.

Our recommendation is based in part on the following considerations:

- A reasonably stringent grain loading standard (0.005 gr/dscf is common for newer baghouses) offers a high level of confidence that the baghouse is operating properly and achieving its design efficiency for control of filterable particulate matter during the emission test. This level of confidence is equivalent to that offered by a control efficiency standard.
- Emission testing required to verify compliance with a grain loading standard would require testing on the baghouse outlet, where exhaust gasses are released to the atmosphere. In order to verify compliance with the proposed control efficiency requirement, testing would have to be conducted simultaneously on both the inlet and outlet ducts to the baghouse. More expensive simultaneous testing on the inlet and outlet would not be necessary for a grain loading standard.

Section 340-244-9070(2)(d)

We recommend that ODEQ consider requiring the installation of bag leak detection systems on baghouses installed under the rule. Bag leak detection systems are significantly more sensitive than the current monitoring specified in the rule in terms of detecting increases in emissions of filterable particulate matter from baghouses that could result from small tears in bags or other control equipment problems. The current monitoring specified in the rule (differential pressure gauges) will only detect

catastrophic failure or plugging of the baghouse. The EPA's area source rule for glass furnaces includes specific provisions regarding the installation of bag leak detection systems. See 40 CFR 63 subpart SSSSSS [63.11453(c)].

Section 340-244-9040(3)(a)

Given our current understanding of hexavalent chromium emissions from glass furnaces controlled with baghouses, we recommend that testing for hexavalent chromium be conducted on the outlet of the baghouse (where gasses are released to the atmosphere). The emission rates of hexavalent chromium released to the atmosphere are the key data necessary for dispersion modeling of downwind impacts, and inlet testing is not likely to produce reliable estimates of hexavalent chromium emission rates.

If you have questions about our comments, please contact Madonna Narvaez of my staff at (206) 553-2117 or by email at narvaez.madonna@epa.gov.

Sincerely,

Madonna Narvaez for

Donald Dossett, Manager
Stationary Source Unit

cc: Mr. Keith Johnson
Manager
Northwestern Regional Office, ODEQ