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July 29, 2016

VIA ELECTRONIC SUBMISSION AT:
https://www.oregon.gov/deq/RulesandRegulations/Pages/comments/Cartglass2016.aspx

Oregon Department of Environmental Quality
Attention: Mr. Joe Westersund
811 SW Sixth Avenue
Portland, OR 97204-1390

Re: Comments on Proposed Permanent Rules for Control of Hazardous Air Pollutants from Colored Art Glass Manufacturing ("CAGM") Facilities

Dear Mr. Westersund:

Thank you for the opportunity to comment on the proposed permanent rules relating to emissions of heavy metals from CAGM facilities. These comments are submitted on behalf of Beyond Toxics, Clean Corvallis Air, The Coalition for Communities of Color, Crag Law Center, Eastside Portland Air Coalition ("EPAC"), League of Women Voters of Oregon, Neighbors for Clean Air, North Portland Air Quality Group, Northwest Environmental Defense Center ("NEDC"), OPAL Environmental Justice, Oregon Environmental Council, Oregon Physicians for Social Responsibility, Portland African American Leadership Forum, and Verde.

In short, while we are in favor of the EQC adopting permanent rules, we believe that the rules as drafted are inadequate for a number of reasons to be discussed in more detail below. We incorporate by reference the earlier comments we submitted on the temporary rule as well as the proposed set of regulations that we drafted and submitted along with those comments. Those earlier comments and draft regulations are dated March 30, 2016.

Our comments on the proposed permanent rules are based upon three principles:

1. The permanent rules should be designed to protect human health from emissions of metals from glassmaking facilities until a permanent air toxics rule can be approved and implemented, a process that is now moving forward;

2. The permanent rules should ensure effective public participation, transparency, and accountability in any DEQ decisions that authorize emissions from regulated facilities, particularly by the communities most affected by the pollution; and

3. The permanent rules should ensure equal protection for all communities regardless of race, ethnicity, and economic class.

Based on these three principles, we have several significant concerns with the permanent rules as drafted. We summarize those concerns below and provide additional detail in the sections that follow.

1. **The proposed permanent rules do not include health-based regulations of emissions from CAGM facilities**. The proposed permanent rules principally require the implementation of emissions-control equipment for Tier 2 facilities by September 1, 2016, thus reflecting a technology-based approach – and not a health-based approach – to regulation. There is no provision in the rule to determine whether emissions in compliance with the technology-based requirements result in threats to human health in the surrounding communities. Furthermore, prior to September 1, 2016, the proposed regulations would allow for emissions of certain heavy metals from uncontrolled furnaces. These interim requirements also are not health based. Thus, these proposed permanent regulations have no health-based (or risk-based) requirements built into them at all despite the fact that Governor Brown and DEQ have been telling the public that Oregon will be developing health-based regulations for air toxics.

2. **The draft permanent rules are too narrow in their design and may result in unintended consequences that further threaten human health.** The permanent rules should apply to all CAGM manufacturing facilities state-wide that produce more than 500 pounds per year of glass, and they should also address the full suite of heavy metals that are known to be associated with those facilities. By limiting the rules to the Portland Metro area and by setting a threshold of 10 tons per year, DEQ is creating artificial incentives for smaller, unregulated, and less professional facilities to produce colored art glass. This is likely to result in unintended consequences, including serious threats to human health, economic impacts to small businesses/Tier 1 facilities, and regulatory burdens on the agency. We strongly suggest, as we did in our comments on the temporary rule, that DEQ expand the scope of the rule to ensure that public health and the environment is protected from emissions of heavy metals from these sources.

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3. **DEQ and EQC must consider how these permanent rules would affect environmental justice communities**. DEQ and EQC have a legal obligation under Title VI of the Civil Rights Acts and ORS 182.454(1) to address environmental justice issues when recommending and adopting new regulations. In particular, under Title VI, as recipients of federal funding, DEQ and EQC must ensure that the proposed CAGM rules do not impose any disproportionate adverse impacts on communities of color. It is therefore essential to meet its legal obligations under federal and state law that DEQ conduct an analysis of the demographic characteristics of the communities that will benefit from the rule – and those that will not benefit from the rule – to ensure equal treatment under the law.

4. **The permanent rules should be amended to ensure that they are consistent with the Subpart SSSSSS regulations.** EPA and DEQ clarified recently that the Subpart SSSSSS regulations apply to certain glassmaking furnaces operated by facilities that will also be covered by the permanent CAGM rules. The permanent rules should be amended to clarify that they apply only to glassmaking furnaces and facilities that are <u>not</u> covered by the Subpart SSSSSS regulations. Otherwise, the permanent rules may impose requirements on CAGM facilities that overlap with and are inconsistent with the Subpart SSSSSS regulations.

5. **The proposed permanent rules do not allow for adequate public participation in DEQ decisions that affect human health.** Under these rules, many important decisions would be made unilaterally by DEQ without any public notice and comment, including the type of emissions control and monitoring equipment to be installed, how that equipment is to operated and maintained, the source testing protocols, details of air dispersion modeling, and the location and means of measuring ambient concentrations of chromium VI.

   The permanent rules should instead prohibit the emissions of heavy metals from facilities regulated by the permanent rules unless and until the source obtains a permit from DEQ authorizing those emissions. The permit applications should include information on the proposed manufacturing processes, including identification of raw materials and the rates at which they are used, emissions control equipment, and a source test plan. The public should then have a full and fair opportunity to review that information and to provide public comments on the draft permit. Only after the permit is issued after public notice and comment should the facility be allowed to emit regulated pollutants. Particularly for Tier 1 facilities, DEQ could expedite that permitting process to ensure both that small businesses have certainty as to their regulatory requirements and that the public has a fair opportunity to participate.

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Below, we provide more detail on each of these topics.

1. The Draft Permanent Rules Do Not Reflect a Health-Based Approach to Air Toxics Regulation.

As we set forth in our comments on the temporary rules, the rule package proposed by DEQ does not reflect a health-based approach to air toxics regulations, which is inconsistent with promises made to the public by the Governor, EQC and DEQ. For months, the public has been told that the State will implement a health-based approach to regulating air toxics, and yet these regulations plainly are not health-based.

A. The Emissions Limitations in the Proposed Permanent Rule Are Not Based Upon Any Estimation of Impacts to Human Health, nor do They Reflect State of the Art Technological Standards.

The core requirement of the proposed temporary rule is contained in OAR 340-244-9030, which would mandate installation of one or more emissions control devices on Tier 2 glass-making furnaces that use arsenic, cadmium, chromium, lead, nickel or manganese as raw materials. This is a technology-based requirement, and it applies on September 1, 2016. For smaller Tier 1 facilities, they have the option of installing emissions controls, limiting the use of metal HAPs, or demonstrating through source testing and dispersion modeling that concentrations of metal HAPs in ambient air will meet certain concentrations. OAR 340-244-9050(1)(a)-(c). Again, except for that last option, which none of the Tier 1 facilities intend to utilize, this is a technology-based approach, focusing principally on the installation of emissions controls. For Tier 1 facilities, these requirements apply on October 1, 2016. The proposed rule also requires that each emissions control device must meet certain performance requirements. OAR 340-244-9070.

This technology-based focus is especially concerning because the proposed permanent regulations require that the emissions control devices meet only a 99.0 percent control efficiency, as opposed to 99.9+ percent. OAR 340-244-9070. It is well-known that baghouses regularly achieve 99.9+ percent efficiency. In February of this year, PCC Structurals submitted a notice of intent to construct a new baghouse at its Large Parts Campus and stated that "[b]aghouses provide a minimum 99.9% removal efficiency" for particulate matter.[1] EPA's Air Pollution Cost Control Manual states that "a properly designed and well run baghouse will generally have an extremely high particulate matter (PM) collection efficiency (i.e., 99.9+ percent)."[2] Thus, even as to these basic technological requirements, DEQ is proposing regulations that fail to reflect the best available controls. What criteria did DEQ consider in setting this standard for control efficiency? Why did DEQ reject 99.9+ percent? What criteria is DEQ basing its decision on?

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[1] *See* http://pccstructuralscommunity.com/assets/documents/lpc-noc-02192016.pdf.

[2] U.S. Environmental Protection Agency, *EPA Air Pollution Cost Control Manual, Sixth Edition* (EPA/452/B-02-001) (January 2002) at Section 6, Chapter 1, pg. 1-13 (https://www3.epa.gov/ttn/ecas/docs/cs6ch1.pdf).

Finally, the permanent rules fail to include any other mechanisms to ensure that emissions from CAGM facilities would not result in a residual risk to human health even if in compliance with the outdated 99.0 percent control efficiency. For instance, recent experiences at Bullseye Glass strongly suggest that the baghouse fails to capture a significant percentage of the hexavalent chromium emitted from the facility. This is likely due to the fact that the chromium has not condensed into particulate matter prior to passing through the baghouse. Thus, even with a baghouse in place, a facility could comply with the permanent regulations while still emitting heavy metals in quantities and at rates that could threaten human health in the neighboring community, particularly because some facilities like Bullseye Glass operate in very close proximity to sensitive receptors like day care facilities, schools and parks.

Furthermore, the experience at Bullseye demonstrates that DEQ and EQC made an ill-informed decision to amend the temporary rule to allow facilities to utilize EPA Method 5 to determine compliance with the emissions limitation, which does not measure condensable particulates, instead of DEQ Method 5, which does. The permanent rules should plainly require that all emissions of heavy metals are considered in determining compliance with restrictions in the regulations. DEQ's earlier statement that CAGM facilities would not emit condensable particulates is plainly incorrect.

For all of these reasons, our organizations would like to know if and how DEQ has determined that these permanent rules are protective of public health. How has DEQ undertaken that analysis and what conclusions were reached? We would like to see an explanation of how these rules do in fact protect public health.

B. The Permanent Rules Should Not Allow for the Emissions of any Heavy Metals from an Uncontrolled Furnace.

While the proposed permanent rules adopt a technology-based approach to the regulation of air emissions from CAGMs, those rules then appear to carve out exceptions to this requirement, weakening the outdated technological standards even further. The rules are internally inconsistent, and it is not clear how DEQ interprets those rules. But it appears that DEQ is proposing to authorize a pathway whereby a Tier 2 glass manufacturer could use chromium III in an uncontrolled glass making furnace. This proposal fails to implement basic technological controls, and is plainly not protective of human health. We cannot understand how new health-based air toxics regulations are being promised while, at the same time, DEQ is proposing to allow for uncontrolled emissions from furnaces charged with chromium III. These are inconsistent positions for the State of Oregon to adopt.

The first point we would like to make is that the proposed final rules are poorly written and internally inconsistent, which creates serious barriers for the public's ability to understand what DEQ is proposing to do. The rules first state that Tier 2 CAGMs "may not use raw materials containing any metal HAPs except in glass-making furnaces that use an emission control device * * *." OAR 340-244-9030. In the very next section, however, the proposed rules state that a "Tier 2 CAGM may use raw materials containing chromium III in a glass-

making furnace (controlled or uncontrolled)" under certain conditions. OAR 340-244-9050(2). Which is it?

If OAR 340-244-9050(2) is an exception to the generally applicable prohibition in OAR 340-244-9030, it should be written in that way. As it is currently drafted, the rules simply do not make sense and do not fit together. They confuse the public and the regulated community, and that confusion will linger and will continue to give rise to questions as long as these rules are on the books.

Second, DEQ has failed to explain how it arrived at 36 nanograms per cubic meter of chromium VI as an acceptable daily impact level. How has DEQ determined that this level is protective of public health? Does this impact level reflect cancer or non-cancer risk? What studies is this number based upon? Has DEQ sought input from its Air Toxics Scientific Advisory Committee on whether this daily impact level is protective of public health?

Moreover, it makes no sense to set the annual acceptable source impact level at .08 nanograms per cubic meter while setting a daily acceptable source impact level of 36 nanograms per cubic meter. One day of emissions at 36 would immediately cause a violation of the annual average of .08 (*i.e.*, 36/365 = .1). How does DEQ intend to calculate the annual acceptable source impact level? Why would DEQ set a daily limit that is inconsistent with the annual limit?

Third, the proposed permanent regulations do not specify how the air dispersion modeling and analysis is to be conducted, instead reserving all of those decisions to be made by DEQ on an *ad hoc* basis without any public input. Will DEQ require facilities to use baseline ambient data that includes existing concentrations of chromium VI? As we know from the data collected around Bullseye Glass, ambient concentrations of chromium VI are trending above the annual acceptable impact level. If that is true, how could Bullseye emit any chromium VI while still being protective of public health? The lungs in a child in the daycare center across the street do not distinguish between chromium VI from Bullseye Glass as opposed to any other sources. If DEQ is serious about protecting the most vulnerable members of our community, it must force facilities to take into account cumulative exposures from multiple sources along with sophisticated air dispersion models that account for site-specific meteorological conditions. Particularly where we know that existing concentrations are already above health-based action levels, we cannot protect human health unless the air dispersion modeling and subsequent risk analysis take into account actual site-specific conditions and cumulative exposures, which is precisely how people in the neighborhood actually respond to exposure to air toxics. None of this critical information is reflected in the proposed permanent rules.

In sum, it is irresponsible to allow for the emissions of any heavy metals from uncontrolled furnaces. It is disappointing to hear that the State intends to implement a health-based air toxics program while, at the same time, the proposed technology-based set of standards that have gaping holes.

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2. The Permanent Rules Should Apply to all CAGMs that Produce Greater Than 500 Pounds Per Year of Glass, and the Rules Should Apply State-Wide.

The proposed permanent rules should be amended to cast a wider net, because the rules as currently written are likely to lead to unintended consequences. In particular, the rules should apply to all CAGMs that produce more than 500 pounds per year of glass, and the rules should apply state-wide.

Several of our organizations had representatives who sat on the fiscal impact advisory committee for this rule package, and there was unanimous support for expanding the scope and applicability of the permanent rules. Representatives from the Tier 1 manufacturers and Bullseye Glass were all unanimous in their concern that the regulations as proposed could have unintended consequences by forcing production of art glass to take place in garages and other smaller facilities that would fall under the currently proposed 10 ton per year threshold for regulation – in fact, we have heard that this is already taking place. Or, in the alternative, a company could simply move to Eugene or Salem or anywhere else in the State and start producing many tons of art glass without any emissions controls at all. These rules could therefore create an artificial market opportunity for unscrupulous producers of art glass to gain a competitive edge on companies that are trying to do the right thing by complying with these regulations. This is likely to result in more pollution, greater threats to human health, and fiscal impacts on the small business that are subject to the permanent CAGM rule. Moreover, it is also likely to create uncertainty for DEQ, because the agency will then have to respond once production shifts to smaller operators and other parts of the State. It is far more efficient to simply expand the scope of the rule to capture as many CAGM producers as possible across the entire State.

These two issues can be addressed with fairly simple changes to the proposed regulatory language. First, OAR 340-244-9000 should be amended by deleting the phrase "located within the Portland Air Quality Maintenance Area" from the first sentence. Second, the definition of Tier 1 CAGM at OAR 340-244-9010(11) should be amended to include "a CAGM that produces more than 500 pounds per year or more of colored art glass * * *."

3. DEQ and EQC Must Consider How these Permanent Rules Would Affect Environmental Justice Communities.

DEQ and EQC have legal obligations under both federal and state law to account for the environmental justice impacts of this proposed rule. These legal obligations require DEQ to utilize demographic data to assess whether the benefits and burdens of these permanent rules will be shared equally by communities of color and low-income communities. To this point, we have yet to see DEQ and EQC so much as acknowledge these legal obligations, and the rule package is silent as to whether these particular regulations comply.

First, under Federal law, as a recipient of federal funding from EPA, DEQ must comply with Title VI of the Civil Rights Act and EPA's implementing regulations. *See* 40 C.F.R. Part 7.

DEQ "shall not use criteria or methods of administering its program which **have the effect of** subjecting individuals to discrimination because of their race, color, national origin, sex, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program or activity with respect to individuals of a particular race, color, national origin, or sex." 40 C.F.R. § 7.35(b) (emphasis added).

Second, under State law, DEQ must consider the effects of the action on environmental justice issues, which include impacts on minority and low-income communities. *See* ORS 182.545(1).

As we stated in our comments on the proposed temporary rule, we are concerned that by limiting this rule to CAGMs – while excluding other manufacturers of glass – DEQ is knowingly targeting sources of pollution that impact affluent communities in southeast Portland while turning its back on disadvantaged communities in Cully and other areas of Portland that are also suffering from elevated levels of arsenic that may be caused by emissions from Owens Illinois, another glass manufacturer. Thus, we call on DEQ to conduct a thorough demographic analysis of the communities that stand to benefit from these permanent rules, while also considering the communities that may be left behind because this rule has been limited only to CAGMs without targeting all glass manufacturers. DEQ and EQC are legally required under federal and state law to conduct this analysis.

Our organizations are willing to offer comments on or technical assistance with a disparate impacts analysis if DEQ is willing to make a good faith effort to comply with its legal obligations.

4. The Permanent Rules Should be Amended to Ensure That They are Consistent with the Subpart SSSSSS Regulations.

EPA and DEQ clarified earlier this year that the Subpart SSSSSS National Emission Standards for Hazardous Air Pollutants ("NESHAP") regulations apply to Tier 2 manufacturers, in particular Bullseye Glass and Uroboros Glass, because they operate "continuous furnaces" as defined by the regulations. *See* 40 C.F.R. Part 63, Subpart SSSSSS. Oregon has adopted these federal regulations by reference and incorporated them into its State HAP program. *See* OAR 340-244-0220. Under Section 112 of the Clean Air Act, once a State has adopted a program for the implementation and enforcement of the Federal HAP program, the State "shall not * * * set standards less stringent than those promulgated by the Administrator under this chapter." 42 U.S.C. § 7412(l)(1).

Thus, under the Federal Clean Air Act, DEQ and EQC are prohibited from adopting standard that apply to glassmaking furnaces covered by the Subpart SSSSSS regulations if those standards are "less stringent than" the Federal regulations. Here, the proposed permanent rules are "less stringent than" the Federal regulations in a number of important ways.

First, the SSSSSS regulations include numeric emissions limitations at Table 1 of the regulations. Emissions are limited to .2 pounds of PM per ton of glass produced. 40 C.F.R. Part

63. Subpart SSSSSS, Table 1. The original temporary rules proposed to include this same emissions limitations, but for unknown reasons DEQ then abandoned this limitation and instead included a 99% efficiency rating for the emissions control equipment, and compliance is determined utilizing a test method that does not account for condensable particulates. Because the Federal limit places a cap on the mass of PM (including condensables) that can be emitted – and because the proposed final regulations do not – the proposed CAGM rules are "less stringent than" their federal counterparts.

Second, the federal rules do not allow for any uncontrolled emissions of chromium. As discussed above, the proposed permanent rules appear to allow for uncontrolled emissions of chromium under OAR 340-244-9040(2). Thus, the proposed CAGM rules are "less stringent than" its federal counterpart.

Third, the federal SSSSS regulations include requirements on initial compliance demonstrations, monitoring requirements, and continuous compliance requirements, which are not found in the proposed permanent CAGM rules. Again, the proposed rules are "less stringent than" their federal counterparts.

DEQ should address this issue by stating in OAR 340-244-9000 that these permanent CAGM rules do not apply to furnaces that are regulated by the Subpart SSSSSS NESHAP regulations.

5. The Proposed Permanent Rules Do Not Allow for Adequate Public Participation in DEQ Decisions That Impact Human Health.

We again reiterate the points made in our comments on the draft temporary rules relating to public participation. Under these proposed regulations, DEQ would authorize facilities to emit pollution **before** those facilities would have to obtain permits from DEQ to do so. This regulatory structure has the process backwards – the final regulations should prohibit facilities from utilizing heavy metals in glassmaking furnaces unless and until they have obtained from DEQ a permit authorizing them to do so. Instead, under the proposed structure, DEQ would authorize pollution before the permits are issued, and the **public and community members who would be affected by that pollution would therefore have no opportunity for input during many critical DEQ decisions**.

Along with a prohibition on unpermitted emissions, the regulations should specify all information that DEQ would need in order to develop a draft permit, including an emissions inventory, a list of proposed emissions control equipment, a source test plan, and a plan for air quality modeling and air dispersion analysis. All of that information should be available for public review in conjunction with a draft permit. This would then allow for the public to receive notice before a company begins to pollute near schools, hospitals and other sensitive receptors. And it would ensure that the impacted communities have a fair and meaningful opportunity to participate in decisions that affect their health and well-being and the livability of their communities.

6. Conclusion.

Thank you for considering our comments on the proposed permanent rules for CAGM facilities. Our organizations are extremely concerned and disappointed that these regulations reflect a technology-based approach to regulation despite the fact that our communities have been promised to our communities a health-based approach to regulation. To address this flaw, we strongly encourage DEQ and EQC to:

1. expand the scope of the rule to encompass all HAPs and all facilities;
2. strengthen the technological standards;
2. eliminate the loopholes that would allow uncontrolled emissions;
3. fulfill their legal obligations to consider environmental justice effects;
4. design a process to consider residual health threats; and
5. reform the permitting process to ensure for fair and meaningful public participation by impacted communities.

Please contact our office if you have any questions regarding this information.

Sincerely,

Chris Winter
Co-Executive Director

cc: Ms. Lisa Arkin, Executive Director, Beyond Toxics
Ms. Kathleen Fowler and Ms. Melanie Place, Acting Co-Chairs, Clean Corvallis Air
Ms. Maggie Tallmadge, Environmental Justice Manager, Coalition for Communities of Color
Ms. Amanda Jarman and Ms. Jessica Applegate, East Portland Air Coalition
Normal Turrill, President, League of Women Voters of Oregon
Ms. Mary Peveto, President, Neighbors for Clean Air
Ms. Stacey Schroeder, North Portland Air Quality Group
Mr. Mark Riskedahl, Executive Director, Northwest Environmental Defense Center
Mr. Huy Ong, Executive Director, OPAL Environmental Justice
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Mr. Tony DeFalco, Living Cully Coordinator, Verde
Governor Kate Brown
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Senator Ron Wyden
Senator Jeff Merkley
Congressman Earl Blumenauer
State Rep. Tina Kotek
State Rep. Barbara Smith-Warner

State Rep. Lew Frederick
State Sen. Chip Shields
State Sen. Diane Rosenbaum
State Rep. Ken Helm
State Rep. Kathleen Taylor
State Rep. Rob Nosse
State Rep. Alissa Keny-Guyer
State Sen. Michael Dembrow
State. Rep. Mitch Greenlick
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Mayor Charlie Hales