Question:

For Tuesday's meeting, my sense is that the Commission needs a very clear understanding of the federal and/or state regulatory framework that does not now include these metals emitted from the glass manufacturers.

I think we need to be prepared to address whether emissions of these metals are regulated from ANY manufacturing or other processes so that everyone understands why we are considering emergency rules specific only to these metals and this type of manufacturer.

Does that make sense?  In other words, for purposes of educating our stakeholders, why isn't the agency addressing ALL toxic substances emitted from ALL sources?  In presenting the emergency rules, staff need to be prepared to explain the approach (for benefit of the public and media as well as commissioners).

**Answer: The existing federal and state regulatory framework is described below:**

**Under the Clean Air Act (CAA) Amendments of 1990, EPA is required to develop emission standards that are intended to reduce the risk from Hazardous Air Pollutant (HAP) emissions.**

**EPA does this by developing regulations known as National Emission Standards for Hazardous Air Pollutants, also known as NESHAPs.**

**The 1990 CAA Amendments define a major source of HAPs as a source that emits 10 tons per year or more of any single HAP, or 25 tons per year or more of a combination of HAPs. Sources that emit less than these amounts are known as “area sources”. EPA’s initial efforts to develop NESHAPs focused on the larger major sources, such as pulp and paper mills, oil refineries, etc. In more recent years, EPA has been developing NESHAPs for area sources. At this point in time, EPA has developed approximately 150 NESHAPs for both major and area sources.**

**DEQ implements the federal NESHAP program and has not developed any state-specific NESHAPs.**

**One of the area source NESHAPs (40 CFR Part 63 Subpart SSSSSS, refered to herein as “Subpart 6S”) applies to smaller glass manufacturing operations, but at this time DEQ understands that Subpart 6S does not apply to sources such as Bullseye and Uroboros. EPA may revise the rule or make a determination that it does apply to Bullseye and Uroboros, but until that is done, DEQ’s understanding, based on a review of EPA’s rule and the rule preamble, is that Subpart 6S does not apply. Thus, at this time, there are no regulations that are intended to specifically control emissions of metals from Bullseye and Uroboros.**

**NESHAPs are developed for entire, nationwide industry sectors; they are not developed to address specific, local situations such as those found in Portland at this time.**

**Various NESHAPs do regulate emissions of metal HAPs. For example, one NESHAP regulates chromium electroplating and imposes requirements that are intended to reduce emissions of chromium. There are other NESHAPs that regulate metal HAPs as well.**

**DEQ has committed to develop a program to regulate air toxics, and DEQ anticipates that this program will address a broad range of emissions sources on a statewide basis. However, at this time DEQ is attempting only to address the immediate concerns identified in the Portland area and associated with certain colored glass manufacturers.**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION 244**

**OREGON FEDERAL AND STATE HAZARDOUS AIR POLLUTANT PROGRAM**

General Provisions for Stationary Sources

**340-244-0010**

**Policy and Purpose**

The Environmental Quality Commission finds that certain air contaminants for which there are no ambient air quality standards may cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness or to irreversible ecological damage, and are therefore considered to be hazardous air pollutants. It shall be the policy of the Commission that no person may cause, allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration, or duration determined by the Commission to be injurious to public health or the environment. The purpose of this Division is to establish emissions limitations on sources of these air contaminants. In order to reduce the release of these hazardous air pollutants and protect public health and the environment, it is the intent of the Commission to adopt by rule within this Division the source category specific requirements that are promulgated by the EPA, and state standards to reduce the release of these hazardous air pollutants. Furthermore, it is hereby declared the policy of the Commission that the standards contained in this Division are considered minimum standards, and as technology advances, protection of public health and the environment warrants, more stringent standards may be adopted and applied.

Stat. Auth.: ORS 468.020 & ORS 468A.310  
Stats. Implemented: ORS 468A.025  
Hist.: DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-0100

**Colored Art Glass Manufacturing Facility Rules**

**340-244-9000**

**Applicability**

Notwithstanding OAR 340 Division 246, OAR 340-244-9000 through 9050 apply to facilities located within the Portland Air Quality Maintenance Area that:

(1) Manufacture colored glass for use in art, architecture, interior design and other similar decorative applications; or manufacture colored glass products for use by manufacturers of colored glass for use in art, architecture, interior design and other similar decorative applications; and

(2) Manufacture 10 tons per year or more of colored glass using raw materials that contain metal compounds.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040

**Question: Why is this rule/agreement limited to colored glass manufacturers? Aren’t there other hot spots?**

**Answer: The purpose of this rule is to address the specific concerns identified by the ambient air quality monitoring that was done in SE Portland, near Bullseye Glass. DEQ acknowledges that the moss data indicates there may be other hot spots, but so far there has been no ambient air monitoring to confirm that ambient concentrations are of concern.**

**In addition, this rule was developed very quickly, and there has not been time to make this rule more broadly applicable.**

**Question: Does this rule exempt any colored art glass manufacturers?**

**Answer: Yes, this rule exempts colored art glass manufacturers that manufacture less than 10 tons per year of colored glass. DEQ’s intention is to exempt artists and artisans who make make small amounts of colored glass. DEQ believes any facility that is really in the business of producing colored glass for sale will manufacture more than 10 tons per year.**

**340-244-9010**

**Definitions**

The definitions in OAR 340-200-0020 and this rule apply to OAR 340-244-9000 through 9050. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to this division.

(1) “Colored Art Glass Manufacturer” or “CAGM” means a facility that meets the applicability requirements in OAR 340-244-9000 and refers to the owner or operator of such a facility when the context requires.

(2) “Chromium III” means chromium in the +3 oxidation state, also known as trivalent chromium;

(3) “Chromium VI” means chromium in the +6 oxidation state, also known as hexavalent chromium;

(4) “Chromium”, without a following roman numeral, means chromium in any oxidation state;

(5) “Controlled” means the glass-making furnace emissions are treated by an emission control device approved by DEQ;

(6) “Cullet” means recycled glass that is mixed with raw materials and charged to glass melting furnace to produce glass. Cullet is not considered to be a raw material;

**Question: Why is cullet not considered to be a raw material?**

**Answer: Cullet is recycled glass that is added to raw materials for the purpose of recycling the cullet. According to EPA, once glass has been made, the metals in the glass are not emitted when the glass is remelted. For this reason, EPA’s Subpart 6S exempts cullet, and DEQ has followed suit.**

(7) “Emission control device” means control device as defined in OAR 340 Division 200.

(8) “Glass-making furnace” means a unit comprising a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

(9) “Raw material” means minerals, such as silica sand, limestone, and dolomite; inorganic chemical compounds, such as soda ash (sodium carbonate), salt cake (sodium sulfate), and potash (potassium carbonate); metal oxides and other metal-based compounds, such as lead oxide, chromium oxide, and sodium antimonate; metal ores, such as chromite and pyrolusite; and other substances that are intentionally added to a glass manufacturing batch and melted in glass melting furnace to produce glass. Metals that are naturally-occurring trace constituents or contaminants of other substances are not considered to be raw materials. Cullet and material that is recovered from a furnace control device for recycling into the glass formulation are not considered to be raw materials;

(9) “Uncontrolled” means the glass-making furnace emissions are not treated by an emission control device approved by DEQ; and

(10) “Week” means Sunday through Saturday.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040

**340-244-9020**

**Permit Required**

Not later than September 1, 2016, all CAGMs, not otherwise subject to a permitting requirement, must apply for a permit under OAR 340-216-8010 Table 1, Part B, category #84.

**Question: What does the requirement to apply for a permit really mean?**

**Answer: DEQ has asked EPA to determine if Subpart 6S applies to the colored art glass manufacturers. Facilities that are subject to Subpart 6S must obtain a Title V air operating permit. If EPA finds that 6S does apply, the colored art glass manufacturers that are subject to 6S must obtain a Title V air operating permit. However, some colored art glass manufacturers may not be subject to Subpart 6S; DEQ will require art glass manufacturers that are not subject to Supart 6S to also apply for a permit, although the requirement is for an Air Contaminant Discharge Permit rather than a Title V permit.**

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040

**340-244-9030**

**Emission Control Devices**

No later than September 1, 2016:

**Question: Why did DEQ allow until September 1, 2016?**

**Answer: Thisis actually a very short time to install emission controls. It takes time to design, construct and install a properly-sized emission control device. Doing all that in less than 6 months is difficult. Typically, when new requirements are imposed by rules, the facilities affected by the rule have two or three years to comply. In this case, however, DEQ feels that colored glass manufacturers subject to this rule must procede as quickly as possible.**

(1) Each CAGM must install one or more emission control devices to control all glass-making furnaces that use raw material containing any of the following metals: arsenic, cadmium, chromium or nickel; and

**Question: Why does this only apply to arsenic, cadmium, chromium and nickel?**

**Answer: DEQ performed ambient air quality monitoring near Bullseye in October, 2015. The results of that monitoring indicated the following:**

**The ambient arsenic and cadmium concentrations were well above the Ambient Benchmark Concentrations for those metals, and DEQ asked Bullseye and Uroboros to stop using them (Uroboros has not used arsenic for at least 20 years).**

**The ambient nickel concentration was above the Ambient Benchmark Concentrations for nickely by a small amount. DEQ and OHA agree that the ambient concentration of nickel is of little or no concern, but DEQ still felt that nickel should be addressed.**

**The ambient air quality monitoring done in October, 2015 did not monitor for chromium VI; the monitoring was only for total chromium, which gives no information about chromium VI. DEQ and EPA cannot rule out the possibility that some chromium may be emitted in the form of chromium VI. DEQ therefore included chromium, specifically with regard to chromium VI emissions, in this rule.**

**The concentration of the other metals monitored by DEQ are well below the Ambient Benchmark Concentrations for those metals, so DEQ did not include those other metals in this section of the proposed rules and did not include them in the agreements.**

(2) Each emission control device must meet either of the following requirements: 99.0% removal efficiency for particulate matter as measured by DEQ Method 5 or 0.2 pounds of particulate matter per ton of glass produced as measured by EPA Method 5.

**Question: why are you giving them an option of 99% removal efficiency or 0.2 pounds of particulate matter?**

**Answer: Any emission control device that a CAGM may install should easily meet 99% removal efficiency. DEQ is using this removal efficiency to determine that ambieint concentrations will be safe after the emission control device is installed. The CAGM will be required to perform a source test on the emission control device to ensure compliance with the required removal efficiency. Ongoing monitoring of the operation of the emission control device will also ensure optimum operation.**

**The 0.2 pounds of particulate matter per ton of glass is a requirement from Subpart SSSSSS—National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources. If EPA makes the colored art glass manufacturers subject to 6S, these sources will have to comply with this requirement so we are including it in the temporary rules.**

(3) Emission control device requirements:

(a) The design of all emission control devices must be approved by DEQ before installation.

(b) Each CAGM must submit a Notice of Intent to Construct in accordance with OAR 340-210-0205 through 340-210-0250 no later than 15 days prior to the date installation begins. If DEQ does not deny or approve the Notice of Intent to Construct within 10 days of receipt of the Notice, the Notice will be deemed to be approved.

(c) Emission control devices may control emissions from more than one furnace.

(d) Each emission control device must be equipped with the monitoring device or devices specified by DEQ in DEQ’s approval of the Notice of Intent to Construct required in subsection (b).

(e) Each emission control device must be equipped with inlet ducting that provides the following:

(A) Sufficient cooling of exhaust gases to no more than the maximum design inlet temperature under worst-case conditions; and

(B) Provision for inlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.

(f) Each emission control device must be equipped with outlet ducting that provides for outlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.

(A) After commencing operation of any emission control device, each CAGM must observe and record the parameters specified by DEQ in DEQ’s approval of the Notice of Intent to Construct, required in subsection (b).

(B) Each CAGM must perform the following source testing on at least one controlled glass-making furnace approved by DEQ to demonstrate compliance with either requirement in section (2). Source testing done under OAR 340-244-9040(4) may be used in whole or in part to comply with this paragraph.

(i) Within 60 days of commencing operation of the emission control devices, test control device inlet and outlet for particulate matter using DEQ Method 5 or comparable method;

(ii) A source test plan must be submitted at least 30 days before conducting the source test; and

(iii) The source test plan must be approved by DEQ before conducting the source test.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040

**340-244-9040**

**Operating Restrictions**

1. CAGMs may not use arsenic, cadmium or chromium VI in raw materials in any glass-making furnace that is not controlled by an emission control device approved by DEQ.

**Question: The rules and agreements appear to treat each metal differently; why is that?**

**Answer: The rules and agreement do treat different metals differently. The reasons for this different treatment are given below:**

**ARSENIC and CADMIUM**

**The rules and agreements state that arsenic and cadmium may not be used in uncontrolled furnaces. This is because the furnaces at Bullseye and Uroboros are uncontrolled at this time, meaning they are not equipped with emission control devices; and because the average ambient concentration of arsenic and cadmium monitored near Bullseye were well above the Ambient Benchmark Concentrations for these metals. DEQ believes that immediate action was needed to reduce the ambient concentrations of arsenic and cadmium, so the rule and agreements don’t allow the use of arsenic or cadmium in uncontrolled furnaces.**

**DEQ is confidant that the required emission control devices will significantly reduce the ambient concentrations of arsenic and cadmium to levels that are considered protective of human health. For this reason, once emission control devices are installed, there are no restrictions on the use of arsenic and cadmium.**

**CHROMIUM, CHROMIUM III and CHROMIUM VI**

**The October ambient monitoring did not include monitoring for chromium VI; monitoring for chromium VI did not begin until after Bullseye stopped using chromium compounds. In addition, DEQ has no information on how much chromium VI might be emitted by Bullseye or Uroboros. In effect, DEQ has no information that might be used to make an informed decision regarding chromium VI, so DEQ has taken a very cautious and protective approach to chromium.**

**Two forms of chromium are used by Bullseye and Uroboros: chromium III and chromium VI. These are discussed below:**

**Chromium may be emitted as either chromium III or chromium VI, but the test for chromium VI is more difficult and expensive than the test for “total chromium”. The test for total chromium tells how much chromium is present, but it doesn’t tell whether it is all chromium III, all chromium VI, or a mix of both chromium III and VI. The ambient monitoring in October, 2015, was only for total chromium.**

**Chromium III is of much less concern than chromium VI. However, DEQ believes it is possible that some chromium III gets converted to chromium VI in the glass furnaces. While DEQ expects that little, if any, chromium III will be converted to chromium VI, DEQ can find no directly applicable information that can be used to determine the possible amount of chromium III that may be converted to chromium VI. Therefore DEQ cannot rule out the possibility that such conversion occurs. For this reason, the rule and agreements do not allow the use of chromium III in uncontrolled furnaces until the facilities provide information that can be used to:**

**Determine, by emission testing, how much chromium VI is emitted;**

**Determine, by dipersion modeling, what the ambient concentrations of chromium VI would be; and**

**Using the information above, DEQ will establish usage limits that would ensure that ambient concentrations of chromium VI would not exceed acceptable levels. DEQ notes that the testing would have to be done while using chromium III, and that this may result in some emissions of chromium VI. However, DEQ believes that the amount of chromium VI emitted would be very small; in addition, the testing would be for a short time and there would be little chance that the two-week average ambient concentration would be significantly affected by such testing.**

**Chromium VI is of greater concern than chromium III. As with chromium III, DEQ has found no information that indicates how much chromium VI would be emitted if chromium VI is used. Without this information, DEQ assumes that all chromium emitted from the use of chromium VI would be emitted as chromium VI. However, even with this assumption, there is still no information on how much chromium would be emitted.**

**The testing discussed above for chromium III usage can provide information about how much chromium is emitted; that is, DEQ expects that the same total amount of chromium will be emitted whether the chromium used is III or VI. As mentioned above, DEQ assumes that if chromium VI is used, all chromium emitted will be emitted as chromium VI. This would allow DEQ to calculate the emissions of chromium VI from the use of chromium VI, and to then use dispersion modeling to determine a limit on the amount of chromium VI that may be used. The rule and agreements also would allow emission testing to determine how much chromium VI is emitted, but such testing would only be allowed after DEQ has determined the limit on the amount of chromium VI that may be used; the limit would apply during the testing.**

**NICKEL**

**The October, 2015 ambient monitoring shows an average concentration of nickel that is only a little over the Ambient Benchmark Concentration, and is well below the level that DEQ and OHA have determined to be protective. DEQ believes there is little risk of nickel exceeding a level that is protective of human health, but also felt that some precautions should be taken to be sure that nickel levels do not rise to levels of concern. Therefore DEQ established maximum weekly nickel usage levels that are based on the annual average usage in 2015. In addition, the agreements allow DEQ to require reductions in the amount of nickel used if the ambient monitored concentrations reach specified levels.**

**DEQ notes that nearby ambient monitoring may not be available for each facility that could be subject to the rules. For this reason, the rules do include the specific nickel requirements that are in the agreements. Instead, the rules allow DEQ to impose limits if ambient monitoring shows a need for such limits.**

**OTHER METALS**

**DEQ’s ambient monitoring includes the following other metals: beryllium, cobalt, lead, manganese and selenium (check list !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!). The average ambient concentrations of these metals were well below the Ambient Benchmark Concentrations, and DEQ believes there is little risk that the Ambient Benchmark Concentrations will be exceeded, so the agreement do not include any specific requirements for these metals. However, the rules, as for nickel, allow DEQ to impose limits if ambient monitoring shows a need for such limits for other metals.**

1. Each CAGM must comply with either section (3) (Option 1) or section (4) (Option 2), and may comply with both but is not required to comply with both.

**Question: Why are there two options? And Why are there two chromium testing options?**

**Answer: The first option is taken from the letter sent to Bullseye and Uroboros on March 57th, 2016 ???????????????. This option was established specifically to determine how much, if any, chromium III is converted to chromium VI in a glass-making furnace. This option requires that the tested furnace stack be cleaned or replaced to eliminate the possibility that residual chromium on the inside surface of the stack would bias the test result. DEQ staff were not allowed to change the requirements in the letter. This would be useful information, but in hindsight DEQ staff felt that it might be better to do the testing without cleaning or replacing the stack, as this would give a better idea of actual emissions rather than hypothetical emissions. The second option also takes into account that Bullseye may install a baghouse in the next few weeks and would therefore be able to conduct emissions testing on a controlled furnace, which would be more protective of health.**

|  |  |
| --- | --- |
| **Option 1** | **Option 2** |
| **Test an uncontrolled furnace, or test the inlet to an emission control device (equivalent to an uncontrolled stack)** | **Test a controlled furnace** |
| **Test for total chromium and chromium VI** | **Test for total chromium and chromium VI at the control device outlet, and also test for particulate matter at the control device inlet and outlet to determine the efficiency of the control device** |
| **Clean the exhaust stack or replace it; this will give the most accurate information on the conversion of chromium III to chromium VI** | **Cleaning or replacement of the stack is not required; this will give the maxium emission rate if there is chromium on the inside surface of the stack** |
| **Perform dispersion modeling to determine the ambient concentration that would result from the maximum chromium VI emission rate.** | **Perform dispersion modeling to determine the ambient concentration that would result from the maximum chromium VI emission rate.** |

(3) Option 1: The CAGM may not use chromium III in uncontrolled glass-making furnaces until DEQ establishes a maximum allowable chromium III usage rate for uncontrolled glass-making furnaces that will not result in ambient concentrations that exceed 1.6 ng/m3 of chromium VI. Thereafter, the CAGM must comply with the maximum allowable chromium III usage rate for uncontrolled glass-making furnaces established by DEQ. For the purpose of establishing a maximum allowable chromium III usage rate, the following are required:

(a) Performing a source test in an uncontrolled furnace or at the inlet of an emission control device as specified below:

(A) Test using DEQ approved protocols and methods for total chromium and chromium VI and submit a source test plan detailing the approach to DEQ for approval;

(B) Test while making a glass that DEQ agrees is made under the most oxidizing combustion conditions and that contains a high percentage of chromium III as compared to other formulas used by the CAGM;

(C) Keep records of the amount of chromium III used in the batches that are produced during the source test runs, as well as other operational parameters identified in the source test plan; and

(D) Prior to the source test, clean the furnace stack in a manner that has been approved by DEQ and complies with applicable OSHA standards, or replace the furnace stack to be tested.

(b) Performing dispersion modeling to determine the ambient concentrations of the CAGM’s air emissions at nearby and adjacent receptors as follows:

**Question: why are you requiring modeling when you have ambient monitors?**

**Answer: DEQ can use the ambient monitoring data to “calibrate” the models that are used to predict ambient concentrations. DEQ has meteorological data for the whole year that would better predict ambient concentrations on an annual basis. Ambient monitoring is very expensive so DEQ foresees the use of dispersion modeling as a good predictor of ambient concentrations when monitoring data is not available.**

(A) Submit a modeling protocol for approval by DEQ;

(B) Use the maximum chromium VI emission rate;

(C) Determine the impact at receptors approved by DEQ; and

(D) Establish a maximum chromium III usage so as not to exceed an ambient concentration of 1.6 ng/m3 of chromium VI.

(c) The CAGM must keep daily records of all batches produced and provide to DEQ, each week, the daily amount of arsenic, beryllium, cadmium, chromium III, chromium VI, cobalt, lead, manganese, nickel, and selenium used.

(4) Option 2: The CAGM may not use chromium III in controlled or uncontrolled glass-making furnaces until DEQ establishes maximum allowable chromium III usage rates for uncontrolled or controlled glass-making furnaces that will not result in ambient concentrations that exceed 1.6 ng/m3 of chromium VI. Thereafter, the CAGM must comply with the maximum allowable chromium III usage rates for uncontrolled or controlled glass-making furnaces established by DEQ. For the purpose of establishing maximum allowable chromium III usage rates, the following are required:

1. Performing a source test as specified below:

(A) Test using DEQ approved protocols and methods for total chromium, chromium VI, and particulate matter (DEQ Method 5) and submit a source test plan detailing the approach to DEQ for approval;

(B) Test for chromium and chromium VI at the outlet of the emission control device, and test for particulate matter at both the inlet and the outlet of the emission control device;

**Question: Why aren’t you requiring chromium and chromium VI testing at the inlet of the control device?**

**Answer: DEQ can use the inlet and outlet testing on particulate matter to determine the amount of chromium going into the emission control device. This information will provide a very conservative estimate of how much chromium VI is being emitted while using either chromium III or chromium VI. If the CAGM wants to do inlet and outlet testing while using chromium VI to provide a more accurate number, they have that option as specified in section (5) below.**

(C) Test while making a glass that DEQ agrees is made under the most oxidizing combustion conditions and that contains a high percentage of chromium III as compared to other formulas used by the CAGM;

(D) Keep records of the amount of chromium III used in the batches that are produced during the source test runs, as well as other operational parameters identified in the source test plan; and

(b) Performing dispersion modeling to determine the ambient concentrations of the CAGM’s air emissions at nearby and adjacent receptors as follows:

(A) Submit a modeling protocol for approval by DEQ;

(B) Use the maximum chromium VI emission rate;

(C) Determine the impact at receptors approved by DEQ; and

(D) Establish a maximum chromium III usage so as not to exceed an ambient concentration of 1.6 ng/m3 of chromium VI.

(c) The CAGM must keep daily records of all batches produced and provide to DEQ, each week, the daily amount of arsenic, beryllium, cadmium, chromium III, chromium VI, cobalt, lead, manganese, nickel, and selenium used.

(5) CAGMs may apply source testing protocols equivalent to those in section (4) to the use of chromium VI in a glass-making furnace to establish maximum usage rates for chromium VI in controlled glass-making furnaces that will not result in ambient concentrations that exceed 1.6 ng/m3 of chromium VI.

(6) CAGMs are not restricted on the raw materials that may be used in glass-making furnaces that are controlled by an emission control device approved by DEQ, except that the use of chromium III and chromium VI will be subject to maximum usage rates determined by DEQ.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040

**340-244-9050**

**Other Metals**

If DEQ determines that ambient concentrations of a metal in the area of a CAGM pose an unacceptable risk to human health and that emissions from an uncontrolled furnace at the CAGM are a contributing factor, then DEQ must limit the CAGM’s use of the metal of concern in uncontrolled furnaces, by agreement or in a permit, to reduce such risk. DEQ must consult with the Oregon Health Authority when applying this rule. Exceeding the limits established under the authority of this rule is a violation of this rule.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040   
Stats. Implemented: ORS 468A.025, & 468A.040