State of Oregon Department of Environmental Quality

Annual Legislative Rulemaking Report 2016

(HB 4106 (2016); ORS 192.245)

Contact: Meyer Goldstein, Agency Rules Coordinator
700 NE Multnomah St., 6th Floor
Portland, 97232

1) Introduction

This report satisfies the requirements of HB 4106 (2016) and ORS 192.245 that require administrative agencies to annually submit a report to the legislature describing their rulemaking activities.

2) Permanent Rules

The Department of Environmental Quality adopted, amended, repealed or suspended 42 permanent rules under ORS 183.335(2) and (3) during 2016.

3) Temporary Rules

The Department of Environmental Quality adopted, amended or suspended 16 rules under ORS 183.335(5) during 2016.

(A) List of Temporary Rules Adopted

DEQ 4-2016 (Colored Art Glass Manufacturer Emissions)

340-244-9000	340-244-9010	340-244-9020	340-244-9030	340-244-9040
340-244-9050	340-244-9060	340-244-9070	340-244-9080	340-244-9090
340244-0010				

DEQ 5-2016 (Clean Fuels Baseline Correction)

340-253-8010	340-253-8020	340-253-8030	340-253-8040

DEQ 6-2016 (Colored Art Glass Manufacturer Emissions Corrections)

340-244-9070

(B) Justification for Rules

Rule No.

Colored Art Glass Manufacturer Emissions

340-244-9000	340-244-9010	340-244-9020	340-244-9030	340-244-9040
340-244-9050	340-244-9060	340-244-9070	340-244-9080	340-244-9090
340-244-0010				

Statement of Need for the Rule

DEQ addressed the urgent need to control metals emissions from colored art glass manufacturing facilities. As DEQ determined through air monitoring and facility inspections, uncontrolled glass furnaces processing colored glass to which arsenic, cadmium, chromium and nickel are added likely emit these metals at levels that can pose an immediate threat to the health of people nearby. Monitoring close to a colored art glass facility with uncontrolled furnace emissions showed metals concentrations at levels that can significantly increase risks of cancer and other health problems.

These rules were necessary to address a regulatory gap. No other state or federal standards currently apply to limit potentially unsafe levels of metal emissions from these types of colored art glass facilities. Waiting for longer-term state or federal solutions could result in unacceptably long periods of additional health risk for people living nearby.

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.

Many times the NESHAPs apply to only major sources which are sources with 25 tons per year of total HAPs or 10 tons per year of an individual HAP. In some cases the NESHAPs regulate some smaller or area sources of HAPs. But in cases where there is no NESHAP for smaller sources, or where a source is too small to be regulated by an area source NESHAP, DEQ does not have air toxics regulations that apply. Even if the potentially relevant NESHAPs applied, individual furnaces at the facilities may not be subject to the emissions reduction requirements and emissions may still have an unacceptable impact on the public.

Findings on failure to act promptly

The consequences of the EQC not taking immediate action to adopt the proposed rules would be that emissions from colored art glass manufacturers could continue to cause elevated and possibly unsafe levels of metals in the Portland area.

The two larger colored art glass manufacturers in the Portland area have been operating for 36 and 42 years, respectively. Now that DEQ has verified monitoring and inspection data to show that the facilities have uncontrolled furnace emissions that can significantly increase risk of cancer and other diseases the emissions had to be controlled immediately to prevent any additional health burden to those already exposed and any unacceptable health risk to all people nearby.

DEQ is concerned about all potentially unsafe levels of metals, but in particular arsenic, cadmium and chromium VI. Arsenic exposure at high levels over a long period of time may cause developmental delay in children, but it is not known for sure. Long-term arsenic exposure is also linked to skin color changes, nerve damage, skin cancer, and cancers of the lung, bladder,

and liver. Cadmium remains in the body for about 28 years and any additional accumulation can contribute to cancer risk or kidney damage. It is imperative to avoid unacceptable exposure to arsenic and cadmium for children at nearby childcare facilities and schools. Since chromium III heated in furnaces can produce some percentage of chromium VI, and this compound is acutely toxic and carcinogenic, the rules to test for and set up an allowable usage rate of chromium III were immediately necessary to avoid any further public exposure to chromium VI.

The action was to adopt rules to require colored art glass manufacturers to install emission control devices on glass-making furnaces. The rules also prohibit using arsenic, cadmium and chromium VI and establish procedures to set levels of allowable chromium III usage that would protect public health. Under the conditions in glass production furnaces, some percentage of chromium III transforms to chromium VI.

A temporary rule avoided or mitigated consequences by requiring emission control devices on glass-making furnaces to reduce the metal emissions.

The control devices that the colored art glass manufacturers will install are required to have removal efficiencies of 99% or higher. The requirement to install emission control devices would reduce metal emissions to levels that DEQ and the Oregon Health Authority believe would be safe for the public. If smaller manufacturers elect not to install emissions control devices they must demonstrate that the impacts from their furnaces are below acceptable health based impact levels. Larger colored art glass manufacturers must install emission control devices on glass-making furnaces that use all of the metals regulated by the rule.

Explanation of why ORS 183.335(5) was the most appropriate method for adopting and why it was not appropriate to proceed under ORS 135.335(20 and (3)

DEQ received information it had not previously possessed indicating that small art glass manufacturing facilities were dispersing harmful substances into the local environment. These substances are known to present health risks for people exposed to them. This health threat had been ongoing and was immediate.

An average DEQ permanent rulemaking takes about ten months to complete. DEQ can complete a temporary rulemaking in two to three months. In addition, DEQ wanted to take the time to put detailed study into this issue before establishing permanent rules. DEQ determined it was urgent to put measures into place as quickly as possible to protect public health from a previously un-identified health risk.

Rule No.

Clean Fuels Baseline Correction

340-253-8010	340-253-8020	340-253-8030	340-253-8040

Statement of Need for the Rule

In February 2016, a regulated party contacted the Clean Fuels Program because calculations they had developed while planning for compliance with the clean fuel standards were not consistent

with those the Environmental Quality Commission adopted on December 9, 2015. DEQ determined that the adopted rules omitted a necessary adjustment for the energy density of ethanol and biodiesel relative to the energy density of gasoline and diesel fuel. This omission affects calculations to establish the clean fuel standards. The omission results in the standards being lower than they should be.

The omission also affects calculations that establish the carbon intensity values for gasoline blended with 10 percent ethanol (E10) and diesel fuel blended with 5 percent biodiesel (B5). It does not affect the carbon intensity values of other fuels used in the Clean Fuels Program. The omission results in the carbon intensity values for E10 and B5 being lower than they should be.

This affects the program in two important ways:

- Most importantly, the clean fuel standards and the carbon intensity values currently in the rule are simply inaccurate and need to be corrected. Correcting the rule will ensure that reports regulated parties submit are accurate. DEQ enacted this temporary rule to correct the problem so that first quarter reports are accurate.
- The omission has created inaccuracies in the way deficits and credits are calculated and used to demonstrate compliance with the program.

Findings on failure to act promptly

Failure to amend the Clean Fuels Program rules would have seriously prejudiced the public's interest and the interests of parties required to comply with the clean fuel standards. The Clean Fuels Program relies on the most accurate information available and therefore this omission needed to be corrected as soon as possible.

Failure to amend the Clean Fuels Program rules would have perpetuated clean fuel standards and carbon intensity values for E10 and B5 that were not accurate.

- For parties that generate deficits, failure to adopt the proposed temporary rules would have prejudiced them by causing them to generate more deficits than they should.

- For parties that generate credits, failure to adopt the proposed temporary rules would have them by causing them to generate fewer credits than they should.

- These errors would also have prejudiced the public's interest in the accurate and effective operation of the program.

Explanation of why ORS 183.335(5) was the most appropriate method for adopting and why it was not appropriate to proceed under ORS 135.335(20 and (3)

It ordinarily takes DEQ ten to twelve months to complete a standard, permanent rulemaking. In order for the public to have confidence in the clean fuels program and so that participants in the program could obtain the fair and accurate benefits to which they are entitled, the values and calculations in the rules must be accurate and correct. If DEQ had not adopted these temporary

rules the program, the public and program participants would have been prejudiced by the participants' calculations providing incorrect results and incorrect deficit and credit calculations for the many months it would have taken to undertake a permanent rulemaking to correct this error.

Rule No.

Colored Art Glass Manufacturer Emissions Corrections

340-244-9070

Statement of Need for the Rule

On April 21, 2016, under agenda item I, the Environmental Quality Commission adopted temporary rules regulating Colored Art Glass Manufacturers (CAGMs). After EQC adopted the proposed rules, DEQ found that the rules included a substantive technical error. DEQ therefore asked EQC to adopt a correction to the previously adopted temporary rules.

OAR 340-244-9000 through 9090 impose requirements on CAGMs. These requirements include requirements for Tier 2 CAGMs to install emission control devices and requirements for Tier 1 CAGMs to either install emission control devices, demonstrate they meet the requirements for an exemption from installing emission control devices, or to request a permit condition prohibiting the use of certain metal Hazardous Air Pollutants (HAPs). When emission control devices are installed, the rules also require emission testing to demonstrate that the emission control devices meet 99.0 percent removal efficiency using a specified emission test method. The error was that OAR 340-244-9070 specified the wrong test method.

As adopted, the rule specified using a test method referred to as DEQ Method 5 to demonstrate the removal efficiency. The rule should have instead specified EPA Method 5. Both test methods are used to measure particulate matter emissions. But EPA Method 5 tests only for filterable particulate matter while DEQ Method 5 tests for both filterable and condensable particulate matter.

One of the primary purposes of OAR 340-244-9000 through 9090 is to control metal HAP emissions from CAGMs. DEQ expects the CAGMs to use baghouses to control metal HAP emissions. At the operating temperature of a baghouse the metal HAPs will be in the form of solid particulate matter.

A baghouse is essentially a large air filter. A baghouse only captures filterable particulate matter. To properly measure the efficiency of the baghouse, it is appropriate to use a test method that measures only what the baghouse removes, which is filterable particulate matter. For this reason, the rule should specify EPA Method 5 as the test method associated with baghouse removal efficiency, not DEQ Method 5. DEQ therefore corrected OAR 340-244-9070 to specify that the 99.0 percent removal efficiency requirement is based on EPA Method 5. The correction replaces "DEQ Method 5" with "EPA Method 5."

Findings on failure to act promptly

The consequence of not taking immediate action is that the rule would continue to specify a test method that is inappropriate for the purpose of testing the removal efficiency of filterable

particulate matter. To properly measure the efficiency of a baghouse, it is appropriate to use a test method that measures only what the baghouse removes, which is filterable particulate matter. Because DEQ Method 5 includes condensable particulate matter, DEQ Method 5 will give a biased result that is incompatible with the intent of the rule and that may make it impossible to demonstrate the required removal efficiency. As a result, DEQ will not be able to verify compliance with the rule and therefore the rule's purpose will not be met. This will result in serious prejudice to the public interest because DEQ will not be able to determine whether the rules will have their intended effect of protecting public health.

Explanation of why ORS 183.335(5) was the most appropriate method for adopting and why it was not appropriate to proceed under ORS 135.335(20 and (3)

A conventional DEQ permanent rulemaking normally takes ten to twelve months to complete. DEQ adopted the underlying temporary rules that contained an error because they addressed an urgent and immediate risk to public health based on testing information that had not previously been available to DEQ. As adopted, these temporary rules contained an error that would have invalidated test results and prevented DEQ from accurately verifying compliance with the rules. Adopting this correction through the expedited temporary rules process enabled DEQ to address a significant public health concern in a timely way.

Accessibility

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.

Obtaining copies of report

Any person can obtain a copy of the report by:

- Using the link to the report posted on DEQ's rulemaking web page: DEQ Rulemaking Web Page
- Contacting the DEQ Agency Rules Coordinator at: 700 Multnomah St. NE, 6th Floor, Portland, OR 97232