

State of Oregon Department of Environmental Quality

Bullseye Glass, Co.

Metal Usage Allowances

As a follow up to the MAO between DEQ and Bullseye signed on June 6, 2016. Paragraph 25 of the MAO, DEQ and Bullseye identified how much four metals (cobalt, manganese, nickel and selenium) in uncontrolled glass-making furnaces. The MAO required Bullseye to identify in their request daily usage allowances that will result in ambient concentrations that are protective of human health. Bullseye submitted a request the week of June 13, 2016.

DEQ and the Oregon Health Authority (OHA) both reviewed the request and consulted to ensure that any approval of usage rates would be protective of human health. To analyze the requested rates, DEQ compared Bullseye's usage rates with the ambient concentrations that have been monitored near Bullseye. DEQ considered a requested usage level approvable if DEQ could conclude the following:

- The requested usage level would not result in daily ambient concentrations that would exceed the daily screening concentration (DSC), and
- The requested usage level would not result in average ambient concentrations that would exceed the Ambient Benchmark Concentration (ABC) on a daily basis, although daily concentrations may at times exceed an ABC.

DEQ's review concluded that the requested usage rates for cobalt, selenium and manganese were approvable. However, the requested usage rates for nickel were not approvable, so DEQ calculated lower usage rates that met the approvability criteria. One of EPA's national glass experts reviewed DEQ's conclusions and agreed with them. DEQ sent a letter to Bullseye on June 24, 2016 that approved the usage allowances for cobalt, selenium and manganese and specified lower usage allowances for nickel. The approved usage allowances are listed below.

Raw Material	Daily raw material	12 month raw material	Notes
	allowed (pounds)	allowed (pounds)	
Cobalt	8.0	700	Same as requested
Selenium	3.0	725	Same as requested
	Daily raw material	Raw material allowed	
	allowed (pounds)	until September 1, 2016	
		(pounds)	
Manganese	12.0	550	Same as requested
Nickel	3.4	205	Less than requested

Bullseye may not use any selenium in any uncontrolled furnace unless and until it has agreed in writing to comply with the terms of the City of Portland Bureau of Environmental Services Compliance Order No. C0-16-004-34, issued June 10, 2016. Bullseye's continued use of selenium is further conditioned on its continuing compliance with that compliance order.

The health effects of cobalt, magnesium, selenium and nickel can be found at http://www.atsdr.cdc.gov/. At the approved restricted usage levels, airborne concentrations are not expected to produce short-term or long-term health effects in people. DEQ and OHA will continue to monitor and analyze data to ensure concentrations remain below acute health safety standards.

DEQ's review and letter to Bullseye can be found at http://www.deq.state.or.us/nwr/docs/metalsem/BullseyeGlassMAOAddendNo106-24-16.pdf