From: Mitzi Kugler
To: HAMMOND Joni
Subject: Glass manufacturers
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I attended the meeting for the hearing of the glass manufacturers on March 16, 2016. I was shocked at several parts of the meeting that took place.

First was the lack of knowledge of the industry that the DEQ commissioners had and were going to use to close down production that could lay off over 70 people with living wages in the Portland metro region. The top art glass manufacturers in country are all here in the Pacific Northwest. These are Bullseye Glass Co., Uroboros, System 96, Spectrum Glass, Creation is Messy, Northstar Glassworks, Glass Alchemy and Trautman Art Glass. Two other companies are located in the Midwest; Kokmo Glass and The Paul Wissach Glass Co. These companies produce almost *all* of the art glass that is used worldwide by glass artists. I was taken back that the commissioners wanted information from California; they don't produce art glass.

Second is the lack of knowledge of the chromium that is at the forefront of this investigation. Shouldn't information be known if it is the chromium that is unsafe or not before thinking it is the one that causes harm to humans.

The third is the information that was given to the commissioners was from the DEQ research team. The Moss study finished in 2012 found high levels of certain metals in the Portland Metro region. DEQ receive the studies in May of 2015. To find out more about the levels the DEQ research team decided to have more studies around the heavy metal locations. But the problem is how they then attained the second batch of air study data around Bullseye Glass. The high levels of toxic metals emissions readings data was collected from this air study in October 2015.

When the results were done, DEQ published a report and stated that the moss study "prompted DEQ to set up air monitoring systems near a glass company."

The air monitoring systems finding also stated, "art glass manufacturing are more likely than not to emit potentially unsafe levels of certain metals, including arsenic, cadmium, hexavalent chromium and nickel." But the paper data or the verbal report never identified the levels in the air tests as low, medium, high scale or a scale that is predominating in the field. This is so we could compare the finding in the DEQ own soil tests.

Before Bullseye Glass even saw the report from the DEQ, the findings were published in a newspaper article. This article stated that heavy metals were found in the air and were conducted by DEQ,, sent the neighborhoods in the area into panic mode, fueled by other news media.

So how did the DEQ do the air study? They didn't. In this meeting the DEQ gave verbal testimony that they didn't have resources to fund the air study themselves, so they enlisted a professor from Reed College to have students run a college science project. They also had to borrow equipment to conduct the study.

Did the professor have current knowledge of this particular equipment to be able to teach the students how to run it for the students' science project? Was the machine in good working order? Was the college professor able to certify that this borrowed machine could be calibrated or set functions to make sure it was in working order? How did they assure that the machine was collecting reliable data?

Yet another problem is that the air quality machine was placed in an open, unsecured parking lot adjacent to Bullseye Glass. Was the equipment left unattended? Could people walking by the lot interfere with the equipment or meddle with the machine? Could the data from the borrowed machine of the college students' science project be compromised?

Last, the main issue is that another study was made by the DEQ that discounted the data from the borrowed machine and the college science project. Here the DEQ tested soil samples that were taken again from around the parking lot where the air quality machine was placed. They also tested in a park, swell and a daycare. DEQ researchers themselves did these soil studies and found that the levels **met acceptable and low risk levels for the heavy metals.**

So the high levels from the air study that came from the borrowed equipment run by the college students' science project does **not** correlate with their own DEQ researchers' soil samples. Which study would you believe? The DEQ research team even said that, "They really don't have all the information but it still would be limited at this time." But the DEQ is willing to shut down most of glass plant and laying off maybe over 70 people because the DEQ is using the data from the college science project data that doesn't correlate with DEQ's own findings.

The time now is to have patience and wait until the two larger companies have installed the Baghouses. Then reanalyze the data done by DEQ's own researchers!

Are you really ready to have two companies lay off maybe over 70 people and close three other companies, for a study filled with non-corroborated data that was done by college students?

This is the information given to us at the Temporary Rule meeting on March 14, 2016.

Thank you for your time in reading this information. It does have implications for companies, employees and artists that used the art glass worldwide.

Sincerely,

Mitzi Kugler

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Cheers, Mitzi Kugler

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