

Air quality monitoring near Precision Castparts

Starting March 29, 2016, DEQ began air monitoring to collect air samples at properties adjacent to, and in the vicinity of, the Precision Castparts Corp Structural, Inc. facility at SE Harney Drive and SE 45th Ave. in Portland.



DEQ air toxics monitoring equipment

What is the purpose of the monitoring project?

The purpose of the monitoring is to determine if heavy metals associated with the facility's superalloy/steel casting foundry emissions are present above human health risk-based concentrations. The project will include an array of monitors that will collect data about air toxics metals, temperature, volatile organic compounds, carbonyls and polyaromatic hydrocarbons. DEQ also will collect wind speed and wind direction data in the area to help determine the pollutant sources.

One of the monitors that measures a full spectrum of air toxics was previously located in North Portland above Swan Island to collect air quality data from November 2014 through March 2016. This monitor will now be deployed near the Precision Castparts Corp Structural, Inc. facility.

Why did DEQ select this location for monitoring?

Previous DEQ air toxics monitoring, a [moss study](#) by the U.S. Forest Service and an EPA modeling study showed elevated levels of metals near the Precision Castparts Corp Structural facility. The Oregon Health Authority agrees that collection of air samples in this area will help determine potential risk to the community and help respond to community concerns related to metals emissions shown on moss study maps.

The most recent EPA [National Air Toxics Assessment](#) (NATA) showed this facility to be among the facilities in the Portland region showing the highest potential risk.

NATA is a state-of-the-science screening tool that provides information on the potential risks from breathing air toxics. This tool can inform efforts to identify and prioritize air toxic pollutants, source types, and locations of potential concern.

What will the monitors collect?

Particulate matter emissions from the facility contain metals. DEQ will collect air samples to determine the level of metals in inhalable coarse particles that are smaller than 10 micrometers in diameter (PM10) and total suspended particulate chromium TSP (Cr6+). The monitoring will determine levels of the following air toxics metals that are associated with casting foundry operations at the facility:

- Arsenic
- Beryllium
- Cadmium
- Total Chromium and Hexavalent Chromium
- Cobalt
- Lead
- Manganese
- Nickel
- Selenium

In addition one location will collect the same list of metals, volatile organic compounds, polyaromatic hydrocarbons and other air toxics for one full year starting May 1.

Where will DEQ site the monitors?

DEQ will sample for air toxic metals on SE Harney Drive, and south of the Springwater Corridor Trail. DEQ will measure wind speed and direction at Lewis Elementary at 4401 SE Evergreen St. and at 5300 SE Johnson Creek Blvd.

How long will DEQ monitor in this area?

DEQ will collect the samples for 24 hours averages every weekday and, when access permits, on the weekends for at least 30 days. Then DEQ will reassess the sampling plan to determine whether to continue sampling or make any adjustments to the sampling plan. One monitoring location will operate for at least one year and collect samples every sixth day.

What will air toxics monitoring tell us?

By collecting and analyzing monitoring and meteorology data, DEQ will gain a better understanding of air toxics levels, exposures and risks associated with those exposures. The data can help determine what emission reduction options might be necessary to mitigate risks from exposure to toxic pollutants in the area.



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The monitoring data also may be used for ongoing research to correlate moss metal values with levels of metals measured in the air.

When will the data be available to the public?

After DEQ collects monitoring data, the DEQ laboratory must analyze and check for completeness and accuracy. DEQ will analyze the data and work with public health agencies to provide information to the public.

For more information please contact:

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Alternative Formats

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