



North Portland Air Quality Monitoring Questions and Answers

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Q: What will DEQ's the North Portland monitoring project include?

A: DEQ will locate and operate three types of monitoring equipment on Swan Island for one year. A full spectrum air toxics monitor will measure a wide range of toxic pollutants that pose the most risk to human health as recommended by the Portland Air Toxics Solutions Project.

A particulate monitor will detect levels of metals including cadmium and arsenic at concentrations above health benchmarks. Six to eight meteorology stations will provide information about temperature, wind direction and speed to track weather conditions associated with elevated air pollution.

Q: What is the purpose of the monitoring?

A: By collecting and analyzing additional monitoring and meteorology data, DEQ will gain a better understanding of air toxics sources and exposures and risks associated with those exposures. The data can help determine potential industrial impacts and what emission reduction options might be necessary to mitigate risks from exposure to toxic pollutants in the area. By comparing complaint and source data to wind speeds and directions, DEQ will be able to better identify air pollution sources and patterns from sources. This will allow more informed odor investigations and responses under DEQ's Nuisance Odor Strategy. A more intensive air toxics monitoring investigation in North Portland will build DEQ's knowledge and capacity to understand air pollution problems and solutions in complex urban environments.

Q: Where did DEQ get the funding to do this project?

A: The 2014 Oregon Legislature funded DEQ to conduct air toxics monitoring in the Swan Island area of North Portland.

Q: What will this project cost?

A: DEQ will receive \$375,000 from the Oregon Legislature for this project.

Q: How will this monitoring help with identifying sources of odors from Swan Island?

A: By comparing complaint and industrial facility data to wind speeds and directions, DEQ will be better able to identify air pollution sources and patterns from facilities. This will give DEQ more information as it investigates odors and responses under the Nuisance Odor Strategy.

Q: When will DEQ start operating the monitors?

A: DEQ anticipates the monitors will be installed and collecting data during the fall 2014. DEQ is working on a project plan that will be available later in spring 2014. This plan will include the locations of the monitors, pollutants that will be measured, and anticipated availability of the data.

Q: How will DEQ determine the location of the monitors?

A: The U.S. Environmental Protection Agency provides specific guidance for air toxics monitor siting and data collection to ensure that valid samples are collected. DEQ will use this EPA guidance to site the air toxics monitor along with information about meteorology, complaint locations, modeled pollutant levels, topography, and available space and electricity. DEQ may have to site the meteorology stations separate from the air pollution monitors because they have more specific requirements and must be free of obstructions. DEQ's intent is to ensure the monitors are located in places that best meet the technical requirements and collect data that is representative of community experiences.

Q: Will people have a say in where DEQ locates the monitors?

A: Local knowledge can be very helpful in identifying possible monitoring locations. However, there are many factors involved in properly locating all the monitors, and DEQ wants to ensure that valid data will be collected in accordance with EPA guidelines. DEQ will be responsible for selecting the appropriate sites.

Q: What pollutants will DEQ monitor for?

A: DEQ will be monitoring for over 100 chemical compounds including Acetone, Acetaldehyde, Acrolein, Arsenic, Benzene, Benzo(a)pyrene, 1,3-Butadiene, Cadmium, Chromium VI, Formaldehyde, Manganese, Naphthalene, Nickel, and Toluene.

Q: How long will the monitoring take?

A: Collection of air samples will take about 12 months. During this time and for about six months afterward, DEQ will analyze the samples and check data quality. This is known as quality assurance and quality control. After the quality assurance process, DEQ will provide monitoring results. Meteorological data will be available about four to six months after it is collected.

Q: Why did DEQ select Swan Island as the initial location for air toxics monitoring?

A: Residents of neighborhoods near Swan Island in North Portland are concerned about odors and air pollution. The governor convened the Swan Island North Portland Air Quality Forum to discuss concerns and work on solutions. By collecting and analyzing additional monitoring and

meteorology data, DEQ will gain a better understanding of air toxics sources and exposures and risks associated with those exposures.

Q: Why are odors a problem in North Portland?

A: Odorous compounds from industrial and commercial operations in and around North Portland adversely affect livability. In addition to causing livability problems, odors often cause concern about exposure to toxic air pollutants. While DEQ data show that only a few of these odorous compounds contain the air toxics estimated and measured above health benchmarks, DEQ also seeks to reduce odor impacts that interfere with daily life and can also affect health and well being.

Q: Why does DEQ need to do more air quality monitoring in North Portland?

A: DEQ modeling and limited monitoring data indicate that the dense population of North Portland is exposed to levels of air toxics significantly above DEQ's clean air goals known as air toxics benchmarks.

North Portland is an area surrounded and affected by many sources of toxic air pollution: freight on the river and rail yards, gasoline and diesel engines on congested roadways, residential heating and industrial activities. DEQ's analysis of census data shows that North Portland has one of the highest concentrations of minority and low income populations in the state.

Q: What air toxics monitoring does DEQ currently conduct in the Portland area?

A: There is one air toxics monitor in North Portland near Jefferson High School on North Roselawn Street. This monitor provides a full spectrum of valuable air toxics data but it is too far away from many parts of North Portland to indicate levels of exposure for residents of the full area, including the peninsula near St. Johns and the Bluff near Swan Island.

Q: How will DEQ let people know about the results of the monitoring?

A: DEQ will share the Swan Island monitoring data, once available, with the community in North Portland at information meetings and will provide the information on the DEQ website.

Q: How will Swan Island industrial facilities be affected by this monitoring project?

A: Monitoring provides information to help DEQ determine where to focus air toxics reduction efforts but does not impose any immediate additional requirements on sources of air toxics, including industrial sources.

Q: Where can I get more information about air toxics in Portland?

A: The [Portland Air Toxics Solutions](http://www.deq.state.or.us/aq/toxics/pats.htm) page on the DEQ website has more information <http://www.deq.state.or.us/aq/toxics/pats.htm>.