

Meet SAM! Swansea Air Quality Monitor

Overview

At the request of the community, the Colorado Department of Transportation (CDOT) partnered with Denver's Department of Public Health and Environment (DDPHE) and the Colorado Department of Public Health and Environment (CDPHE) to install a comprehensive air quality monitor at Swansea Elementary School. This project is known as the Swansea Air Monitoring Station, or SAM. SAM monitored the area before construction started in order to establish a baseline and continues to operate during construction, and for one year following the completion of construction on Central 70.



How can I see the monitoring results?

[Click here](#) for hourly measurements at SAM. SAM is one of many air quality monitors in the Denver-metro area and around the state. [Click here](#) for a map of the Denver-metro area sites.

How do I interpret the monitoring results?

The results provided by SAM, and all other monitors in Colorado, are compared against an Air Quality Index (AQI) developed by the Environmental Protection Agency. [Click here](#) for a current summary of the air quality index around the state. To see more on Denver, and specifically at SAM, click on [expand +] and scroll down to SWAN.

Air Quality Index (AQI)

The AQI is an index for reporting daily air quality. It tells you how clean or polluted the air is in a certain location and what associated health effects might be a concern. This measurement is taken from the amount of pollutants in the air, which are regulated by the Clean Air Act. These pollutants include, but are not limited to, carbon monoxide (CO), nitrogen oxide (NO), nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}).

Think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concerns become. An AQI value of 100 generally corresponds to the national air quality standard for the pollutant, which is the level the Environmental Protection Agency (EPA) has set to protect public health.