

How the perimeter air monitoring CURRENT RUNNING AVERAGE is determined

Step 1

A third-party air monitoring consultant for PSE&G collects a confirmatory air sample every 5 working days of soil disturbance activity during excavation. Utilizing a SUMMA Cannister (a stainless steel container that pulls in air), a confirmatory sample is collected over 10 hours to approximate a typical work shift. The sample is collected at a location expected to have the highest potential concentration of airborne contaminants.

Step 2

The SUMMA Cannister with the air sample is sent to a NJDEP-certified laboratory for analysis.

Step 3

The lab analyzes the air sample for a range of contaminants, including volatile organic compounds (VOCs). The project reports the chronic action level for benzene because it has the most stringent action level.

Step 4

The PSE&G air monitoring consultant calculates the “Current Running Average” for benzene data by:

- Adding the current benzene data to the data from all previous confirmatory samples, and
- Dividing the total benzene data by the total number of confirmatory samples taken.

All benzene data combined \div Total number of samples = Current Running Average

Example of how to calculate a current running average (Not actual measurements from the project):

	Measurement	Current Running Average	How it's calculated
Sample 1	0.7	0.7	$0.7 \div 1 \text{ sample} = 0.7$
Sample 2	0.2	0.45	$(0.7 + 0.2) \div 2 \text{ samples} = 0.45$
Sample 3	0.8	0.57	$(0.7 + 0.2 + 0.8) \div 3 \text{ samples} = 0.57$

Step 5

The Current Running Average is posted to the project website Air Monitoring page.