



**Sauganash Elementary School Annex and Renovations
Indoor Air Quality Monitoring Program
FREQUENTLY ASKED QUESTIONS (“FAQs”)**

1. **Introduction & Summary of Work:** The purpose of the Indoor Air Quality Monitoring Program (“Program”) is to evaluate and monitor emissions resulting from construction activities to help assure that the community as well as students and staff are not impacted by fugitive dust. The Program includes daily air quality monitoring at eight indoor locations (air intake plenum for HVAC, Classrooms #E101, #E102, #E201, #E202, the main office, and 1st and 2nd floor corridors) as well as two (2) perimeter outdoor areas (upwind and downwind) to evaluate dust control methods.
2. **Frequently asked Questions:**
 - i. **What is an Indoor Air Quality Monitoring Program (“IAQ”)?** An IAQ Program is designed to minimize exposure to indoor air pollutants and reduce the likelihood of health problems through evaluation, investigation, documentation, and communication. Any potential dust emissions or Particulate Matter resulting from construction activities are reported, evaluated, and monitored.
 - ii. **What is a Particulate Matter 10 (“PM10”)?** PM is a microscopic particle of solid or liquid suspended in air. PM may include particles such as dust, dirt, soot, or smoke. PM10 is a microscopic particle matter 10 micrometers (microns) in diameter or smaller. For reference, a “human hair” is 50 to 70 microns in diameter.
 - iii. **What are acceptable levels of Particulate Matter 10?** Under the Clean Air Act, the EPA’s National Ambient Air Quality Standard (“NAAQS”) for PM-10 specifies a maximum amount of PM-10 in outdoor air over a 24-hour period. The EPA 24-hour standard for PM-10 is 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). This is also equivalent to 0.150 milligrams per cubic meter of air (mg/m^3).
 - iv. **What emits Particulate Matter?** PM may be emitted from construction activities, cleaning agents, landfills, industrial sources, tobacco smoke, pollen, unpaved roads, smokestacks, fires, etc.
 - v. **Can Particulate Matters be harmful?** Exposure to concentrations above the PM10 NAAQS may result in coughing, wheezing, asthma attacks, bronchitis, high blood pressure, and heart and lung issues. Pre-existing health conditions such as heart and lung diseases, children, and older adults are most likely to be affected by exposure to PM10. Thus, the EPA standard for PM-10 (described below) is more protective of the community, in comparison with occupational health standards (such as OSHA), which are designed to protect adults who are healthy enough to work.
 - vi. **What is being done at Sauganash to control Particulate Matter during the construction?** In accordance with the City’s Wrecking Permit requirements, the Contractor implemented dust mitigation strategies to control emissions from construction activities. In addition, the Contractor installed environmental engineering barriers and controls. The levels of PM-10 are being continuously monitored during construction hours. If the PM-10 levels exceed 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) during any 15-minute period, the Contractor is immediately directed to

take any/all necessary measures, including stopping work, re-sequencing construction activities, adjusting and reinforcing any/all barriers and air pathways, properly sealing and securing pre-existing openings (windows, doors, etc.), increasing dust mitigation strategies (“wetting” construction debris), etc. The 15-minute monitoring interval is a conservative quality control limit established in the IAQ Program as a preventative measure and is not a health risk level.

vii. Have there been any reported exceedances?

To date, exceedances beyond the PM10 NAAQS standards have not been reported. However, there have been three instances when the 15-minute monitoring limits were exceeded.

The initial exceedance was reported on February 24th. It was determined the exceedance occurred as result of Contractor activities within the existing basement. The Contractor was directed to immediately stop work and develop a Corrective Action Plan (“Plan”) to address the matter.

A second exceedance was reported on March 1st. It was determined the exceedance occurred due to windows at the school being left open at classrooms #107 and #103.

The third exceedance was reported on March 16th, during demolition work being performed after regular school hours from 2:30pm to 10:00pm. The potential source for the exceedance may be related to current barrier installation and pathway(s) at Door #8. The Contractor was directed to immediately adjust and reinforce its environmental barriers and the air pathways.

viii. Is there a health risk for staff or students who are exposed to PM10? The EPA standard is a level averaged over a 24-hour period. Construction work isn’t continuously performed over a 24-hour period. In addition, students and staff are not in the school for a 24-hour period. Based on the PM10 monitoring data, the calculated 24-hour EPA average was not exceeded. For these reasons, and because of the monitoring limits and controls in place, it is unlikely that students and staff are at risk.

ix. Are copies of the environmental reports related to Indoor Air Quality Monitoring Program available? A repository of information will be established at the school. The information will be available for onsite review. The information will include copies of the approved IAQ Program, IAQ Summary Reports, and Contractor’s Mitigation Strategies. The repository will be updated on a regular basis.