

**\*\*DRAFT\*\***

## **DC United Soccer Stadium**

### **Bi-Weekly Air & VOC Monitoring Report - August 1<sup>st</sup> to August 12<sup>th</sup>**

The Project Team has prepared this air-quality monitoring summary as a part of the District's mitigation and remediation efforts to address the overall health and safety concerns from the residential community abutting the DC United Soccer Stadium site. W. M. Schlosser ("Schlosser"), the District's contractor for the wet utility construction, has been contracted to conduct air-quality monitoring on-site which includes but is not limited to continuous monitoring for volatile organic compounds ("VOCs") and particulate matter using equipment per the National Ambient Air Quality Standards ("NAAQS").

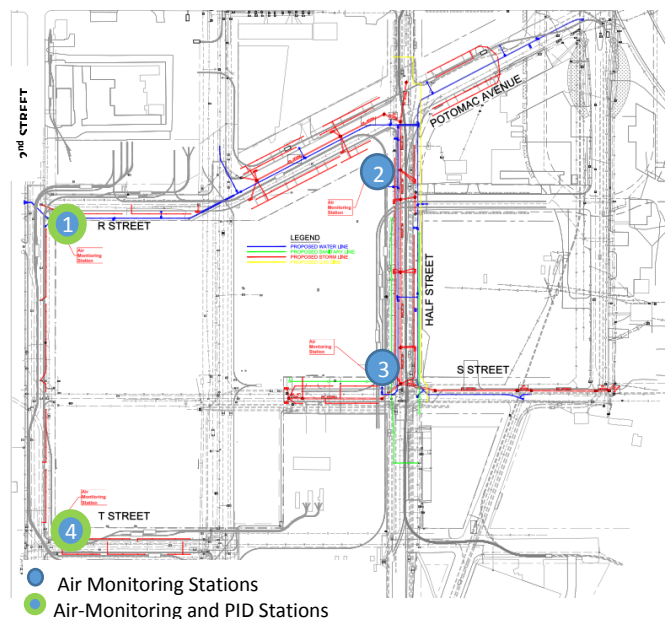
The purpose of this report is to provide a summary of the air-quality monitoring, results, and observations recorded from August 1<sup>st</sup> to August 12<sup>th</sup>. During the utility excavation and backfill operations, Schlosser performed real-time air-quality monitoring using four stations positioned around the perimeter of the construction work areas, during work hours. Real-time air monitoring equipment was used to evaluate the air levels of particulate matter and VOCs during construction in comparison to the EPA NAAQS daily concentration limit of .15 mg/m<sup>3</sup> (150 µg/m<sup>3</sup>) for particulate matter and 1 ppm for VOCs.

Each station was equipped with a TSI DustTrak II Model 8530, mounted on a tripod capable of detecting and measuring particulate matter such as dust, smoke, fumes, etc. To monitor potential VOCs on-site, Schlosser utilized two MiniRAE 3000 that were mounted at two of the TSI DustTrak II Model 8530 stations along Potomac Ave. and Half St. These were used as the photo ionization detectors ("PID"), which measure and detect VOCs in concentrations ranging from 0 to 10,000 parts per million.

From August 1<sup>st</sup> to August 5<sup>th</sup>, as shown in Figure 1, the air-quality monitoring stations were located at four corners of the overall project site, with PIDs located at Station 1 and Station 4:

- Station 1. Northwest Corner – Corner of R Street SW and 2<sup>nd</sup> Street
- Station 2. Northeast Corner- Corner of Potomac Ave SW and Half Street
- Station 3. Southeast Corner – Corner of Half Street SW and S Street SW
- Station 4. Southwest Corner – Corner of 2<sup>nd</sup> Street SW and T Street SW

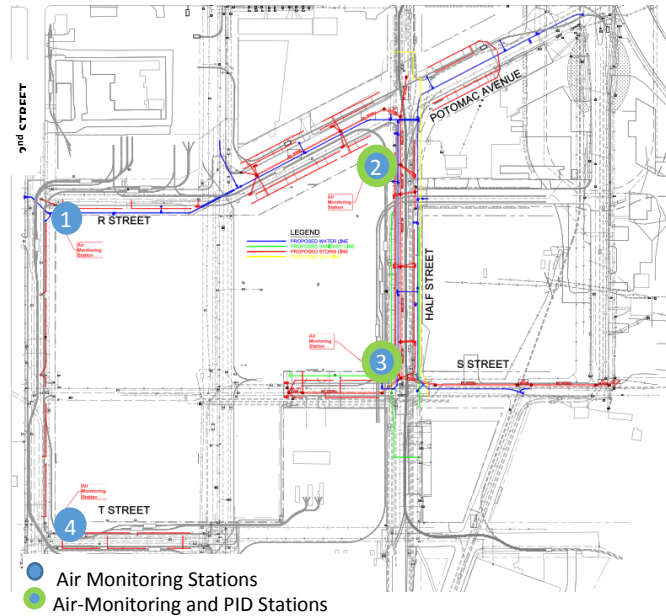
**Figure 1. Air-Quality & VOC Monitoring Locations August 1<sup>st</sup>-August 5<sup>th</sup>**



**\*\*DRAFT\*\***

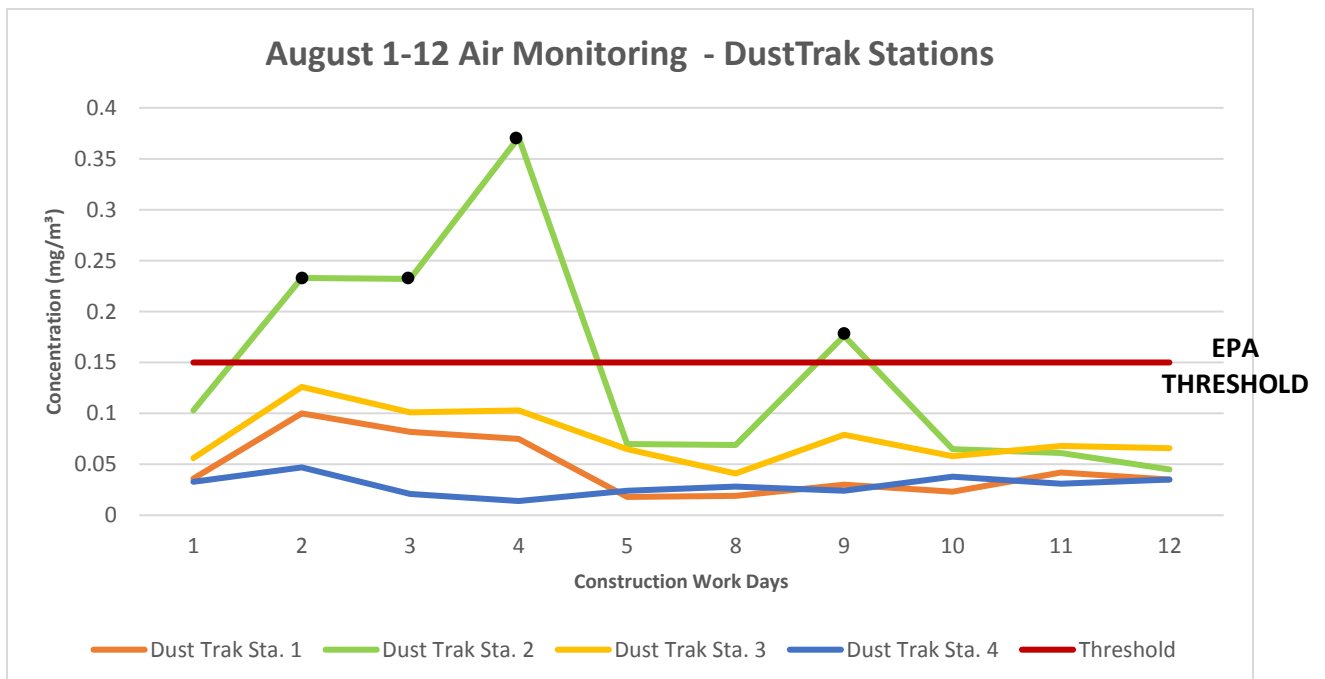
However, from August 8<sup>th</sup> to August 12<sup>th</sup>, as shown in Figure 2, the PID stations were relocated to Station 2 and Station 3, due to increased mass excavation activities on Half St. between Potomac Ave. and S Street.

**Figure 2. Air-Quality & VOC Monitoring Locations August 8<sup>th</sup>-August 12<sup>th</sup>**



The real-time air-quality monitoring equipment has the ability for data-logging, which Schlosser used to produce comprehensive weekly reports, based on daily readings from each station. From August 1<sup>st</sup> to August 12<sup>th</sup>, this data is outlined by station/equipment type in Figure 3.

**Figure 3. August 1<sup>st</sup>-August 12<sup>th</sup> Air Monitoring Data - DustTrak Stations**

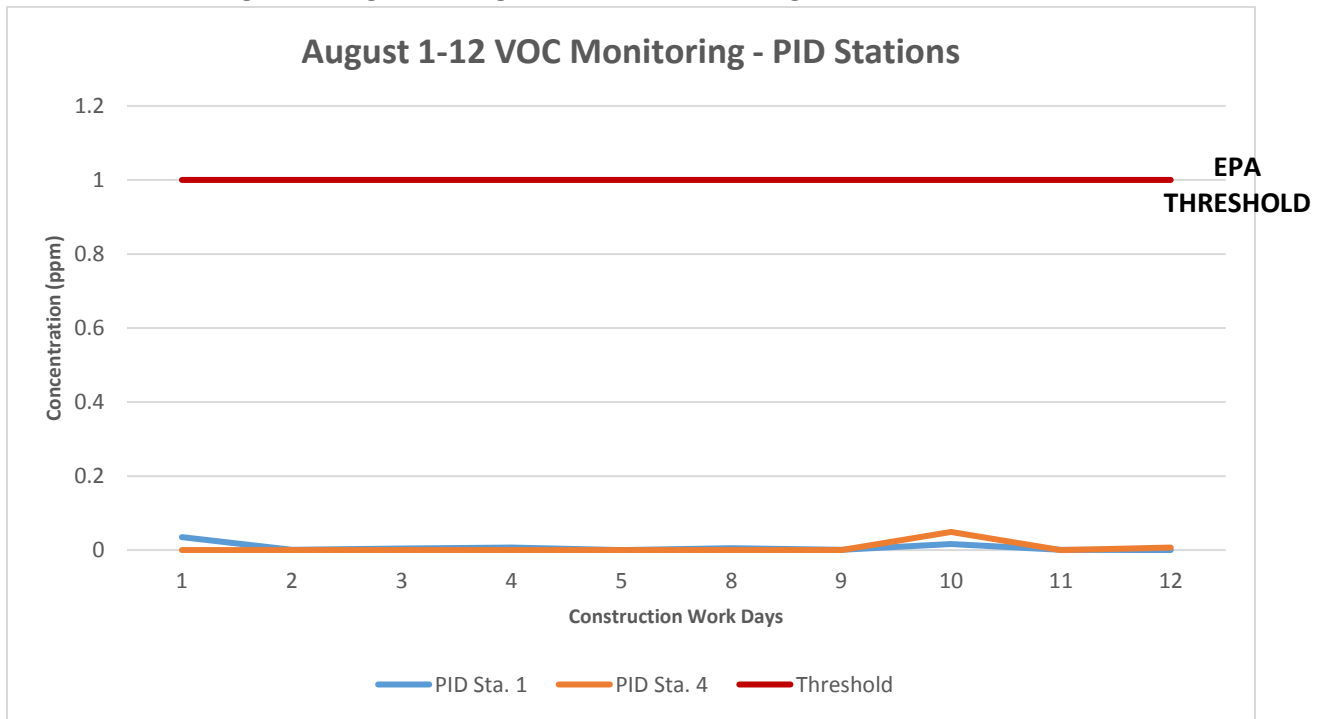


● **FROM AUGUST 1<sup>ST</sup> - 12<sup>TH</sup>, THERE WERE FOUR INSTANCES WHEN THE AIR LEVELS EXCEEDED THE EPA THRESHOLD. CONSTRUCTION WORK WAS TEMPORARILY HALTED AND IT WAS DETERMINED THAT THE AIR LEVEL EXCEEDANCE WAS DUE TO THE CONCRETE PLANTS LOCATED ON HALF ST. AS A PRECAUTION, ADDITIONAL WATER TRUCKS WERE MOBILIZED TO BRING THE AIR LEVELS BACK WITHIN THE EPA THRESHOLD.**

The air-quality monitoring data collected from August 1<sup>st</sup> to August 12<sup>th</sup> indicated that air levels of all compounds of interest ranged from .014 to .371 mg/m<sup>3</sup>, per work day. There were four instances when the air levels around DustTrak Station 2 exceeded the EPA NAAQS daily limit of .15 mg/m<sup>3</sup> (150 µg/m<sup>3</sup>). On those days, construction work was temporarily halted and it was determined that the air level exceedance was due to the concrete plants located on Half St. As a precaution, additional water trucks were mobilized to bring the air levels back within the EPA threshold.

In addition to monitoring particulate matter, Schlosser has been monitoring for VOCs. As stated previously, the VOC monitoring data was analyzed in comparison to the EPA NAAQS daily concentration limit of 1 ppm daily and is outlined by station/equipment type in Figure 4.

**Figure 4. August 1<sup>st</sup>-August 12<sup>th</sup> VOC Monitoring Data – PID Stations**



**NO IMPACT FROM AUGUST 1<sup>ST</sup> - 12<sup>TH</sup>. ALL COMPOUNDS OF INTEREST ARE BELOW EPA THRESHOLD.**

The air-quality monitoring data collected from August 1<sup>st</sup> to August 12<sup>th</sup> indicated that air levels of all compounds of interest ranged from 0 to .049 ppm, per work day, which is significantly lower than the EPA NAAQS daily limit of 1 ppm.