## Background Update on Potential Environmental Issue

**2021 Update: Semi-annual groundwater samples taken in June-July 2021**

**The results for the wells within the plume were similar to previous data and demonstrated steady to declining concentration trends) for all wells and all compounds between 2019 and June/July 2021.**

Background: In fall 2017 Fairlington Meadows was notified of a potential environmental issue stemming from the dumping of chemicals associated with a former dry-cleaning business in the Fairlington Shopping Center.

Environmental testing for PCE (Tetrachoroethene) was conducted near courts 6 and 7 in an effort to determine whether the groundwater contamination that impacted the Fairlington Glen community had migrated into Fairlington Meadows.

ECS Mid-Atlantic, LLC, an environmental consulting firm, monitored by the Virginia Department of Environmental Quality (VDEQ), drilled eight two-inch diameter holes in Meadows and insert PVC pipes about 15 to 20 inches deep to take samples of groundwater. At the conclusion of the exercise the pipes were removed, holes sealed and soil restored.

Subsequent to the analysis of test samples, interpreted results determined that the contaminant plume touched on some Fairlington Meadows property, however it did not reach any residential units in Fairlington Meadows.

VDEQ uses a drinking water standard of 5 parts per billion as a measure of safe groundwater concentration levels, however, the risk is not from drinking the water, as all Fairlington water is supplied by Arlington Country directly from their water treatment plant, rather it is from the eventual decay of PCE into a gas, which potentially could seep through cracks in a basement slab, concentrate in a unit basement and become hazardous.

As PCE decays, it converts into TCE (Trichloroethene), then into c12DCO (cis-1,2, Dichloroethene), which are liquids, and then into a gas. Like for Radon, any potential hazard can be mitigated by venting the space under the basement slab.

Following a Meadows community meeting with ECS where the extent of the contaminant plume in the area was shared, and since the plume came close to Fairlington Meadows, the Board of Directors requested additional drilling and testing to take place.

Additional test wells were drilled in fall 2018 along the rear of Court 6 adjacent to the Fairlington Glen tennis courts. Nothing was found.

In December 2018, a permanent well was installed at the corner of S. Stafford and S. 35th Streets, a short distance from the Court 7 sampling point that indicated a PCE concentration of 149 parts per billion (ppb), at location MW-16, to allow for long-term continuous monitoring of the area in case the plume migrates further into the Fairlington Meadows community. By July 2021, this concentration had decreased to 58.2 ppb. The permanent sampling well will be tested semi-annually for the next two years and then annually for three years, assuming no movement in the PCE groundwater plume. After five years, the sampling schedule will be re-evaluated.

Upon installation December/January 2018, a sample was taken indicating a PCE concentration of 108 parts per billion, a TCE concentration of 7.2 parts per billion, and a c12DCO concentration of 6 parts per billion. The August 2021 report, indicates a decline in all levels from 2019 levels.

The available data from the 2021 monitoring continues to support previous interpretations of the contaminant plume’s location and that it can be expected to degrade naturally. Subslab depressurization systems (SSDSs) were inspected and found to be working properly. ECS will collect another round of groundwater samples from onsite areas and the Glen and Meadows permanent monitoring wells in June 2022.