4.3.3 Preferential Sampling Sequence

A preferred sampling sequence should be established before any sampling event to reduce the risk of cross-contamination. In general, the sampling sequence should be such that sampling starts in areas where it is expected or known to be the least contaminated and then move to areas anticipated or identified to be most contaminated. The sampling sequence can be readily determined if analytical results from past sampling events are available.

For many PFAS investigation sites, no PFAS sampling has been conducted before. In these cases, all site information on possible PFAS uses and potential PFAS migration patterns (e.g., upgradient, downgradient) from PFAS sources at the site should be reviewed before the sampling event to help establish the sampling sequence.

Suppose multiple samples (i.e., monitoring wells) will be collected for an area where a particular or potential PFAS release in the environment might have been documented. In that case, samples known to be upgradient from the impacted area should be sampled first, followed by those furthest downgradient from the suspected source. The remaining wells should be progressively sampled from the most distant downgradient to those closer to the known PFAS source.

If no information is available about the site, samples are to be collected in the following order:

- 1. drinking water (e.g., residential wells)
- surface water
- 3. groundwater

4.4 Decontamination Procedures

It is customary with sampling that equipment is decontaminated at the conclusion of the sampling event. If the previous user of the equipment/materials is unknown or it is unclear how the equipment was handled especially rental equipment, the equipment should be decontaminated before sampling.

Disposable Category 1 sampling equipment should be used, especially for sample bottles and other materials used where the sample may be in contact with the sampling equipment for an extended period.

Non-disposable sampling equipment used at multiple sites or sampling locations can become highly contaminated with PFAS. Decontamination procedures must be implemented to prevent cross-contamination, especially between individual sample locations. It is customary to decontaminate sampling equipment at the end of the sampling event, whether the event is a single sampling location or several sites that conclude at the end of the workday.

The sampling guidance documents will provide information about any media-specific decontamination procedures. There are many decontamination methods for non-dedicated **Category 1** sampling equipment, two of which are listed below.

Decontamination Method 1:

- Do not use Decon 90[®].
- Do not put equipment away without decontaminating it.
- Laboratory-supplied PFAS-free deionized water is preferred for decontamination.
- Alconox[®], Liquinox[®], and Citranox[®] can be used for equipment decontamination.
- Sampling equipment can be scrubbed using polyethylene or PVC brushes to remove particulates.
- Decontamination procedures should include triple rinsing with PFAS-free water.
- Decontaminate sampling equipment after sampling at each location or the end of the workday.
- Commercially available deionized water in an HDPE container may be used for decontamination if the water is verified to be PFAS-free, as defined in <u>Section</u>
 4.2.1 of this document.
- Municipal drinking water may be used for decontamination purposes if it is known to be PFAS-free.

Decontamination Method 2:

- 1. In a PFAS-free bucket, wash the equipment with a mixture of PFAS-free water and PFAS-free soap (bucket #1).
- 2. In a second PFAS-free bucket (bucket #2), rinse the equipment with PFAS-free water.
- 3. A second rinse should be done with PFAS-free water using either a third bucket (bucket #3) or the second bucket (bucket #2) if washed and rinsed.
- 4. For decontamination of additional equipment, change the decontamination water between cleanings.

4.5 Laboratory Considerations

The PFAS analytical list is available on MPART's website, Michigan.gov/PFASresponse, under Investigations and Sites. This list includes the 18 analytes required to be analyzed for in drinking water samples when using EPA Method 537.1, the 25 analytes for EPA Method 533, and the 34 or 40 analytes (depending on method) that EGLE recommends be analyzed for in all other environmental media. The MPART website should be visited to download the most recent document. Laboratories should be able to analyze and report PFAS results that will meet the project-specific data quality objectives identified in the SAP or QAPP.