



MDEQ PFAS SAMPLING QUICK REFERENCE FIELD GUIDE¹

All Items Used During Sampling Event

● Prohibited
<ul style="list-style-type: none"> Items or materials that contain fluoropolymers such as <ul style="list-style-type: none"> Polytetrafluoroethylene (PTFE), that includes the trademarks Teflon® and Hostafion® Polyvinylidene fluoride (PVDF), that includes the trademark Kynar® Polychlorotrifluoroethylene (PCTFE), that includes the trademark Neoflon® Ethylene-tetrafluoro-ethylene (ETFE), that includes the trademark Tefzel® Fluorinated ethylene propylene (FEP), that includes the trademarks Teflon® FEP and Hostafion® FEP Items or materials that contain any other fluoropolymer

Pumps, Tubing, and Sampling Equipment

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> Items or materials containing any fluoropolymer (potential items include tubing, valves, or pipe thread seal tape) 	<ul style="list-style-type: none"> High-density polyethylene (HDPE) Low-density polyethylene (LDPE) tubing Polypropylene Silicone Stainless-steel Any items used to secure sampling bottles made from: <ul style="list-style-type: none"> Natural rubber Nylon (cable ties) Uncoated metal springs Polyethylene 	<ul style="list-style-type: none"> Any items or materials that will come into direct contact with the sample that have not been verified to be PFAS-free <ul style="list-style-type: none"> Do not assume that any sampling items or materials are PFAS-free based on composition alone

Sample Storage and Preservation

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> Polytetrafluoroethylene (PTFE): Teflon® lined bottles or caps 	<ul style="list-style-type: none"> Glass jars⁴ Laboratory-provided PFAS-Free bottles: <ul style="list-style-type: none"> HDPE or polypropylene Regular wet ice Thin HDPE sheeting LDPE resealable storage bags (i.e. Ziploc®) that will not contact the sample media⁶ 	<ul style="list-style-type: none"> Aluminium foil⁴ Chemical or blue ice⁵ Plastic storage bags other than those listed as ■ Allowable Low-density polyethylene (LDPE) bottles

Field Documentation

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> Clipboards coated with PFAS Notebooks made with PFAS treated paper PFAS treated loose paper PFAS treated adhesive paper products 	<ul style="list-style-type: none"> Loose paper (non-waterproof, non-recycled) Rite in the Rain® notebooks Aluminium, polypropylene, or Masonite field clipboards Ballpoint pens, pencils, and Fine or Ultra-Fine Point Sharpie® markers 	<ul style="list-style-type: none"> Plastic clipboards, binders, or spiral hard cover notebooks All markers not listed as ■ Allowable Post-It® Notes or other adhesive paper products Waterproof field books

Decontamination

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> Decon 90® PFAS treated paper towel 	<ul style="list-style-type: none"> Alconox®, Liquinox®, or Citranox® Triple rinse with PFAS-free deionized water Cotton cloth or untreated paper towel 	<ul style="list-style-type: none"> Municipal water Recycled paper towels or chemically treated paper towels

Clothing, Boots, Rain Gear, and PPE

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> • New or unwashed clothing • Anything made of or with: <ul style="list-style-type: none"> ○ Gore-Tex™ or other water-resistant synthetics • Anything applied with or recently washed with: <ul style="list-style-type: none"> ○ Fabric softeners ○ Fabric protectors, including UV protection ○ Insect resistant chemicals ○ Water, dirt, and/or stain resistant chemicals 	<ul style="list-style-type: none"> • Powderless nitrile gloves • Well-laundered synthetic or 100% cotton clothing, with most recent launderings not using fabric softeners • Made of or with: <ul style="list-style-type: none"> ○ Polyurethane ○ Polyvinyl chloride (PVC) ○ Wax coated fabrics ○ Rubber / Neoprene ○ Uncoated Tyvek® 	<ul style="list-style-type: none"> • Latex gloves • Water and/or dirt resistant leather gloves • Any special gloves required by a HASP • Tyvek® suits, clothing that contains Tyvek®, or coated Tyvek®

Food and Beverages

● Prohibited	■ Allowable
<ul style="list-style-type: none"> • No food should be consumed in the staging or sampling areas, including pre-packaged food or snacks. <ul style="list-style-type: none"> ■ If consuming food on-site becomes necessary, move to the staging area and remove PPE. After eating, wash hands thoroughly and put on new PPE. 	<ul style="list-style-type: none"> • Brought and consumed only outside the vicinity of the sampling area: <ul style="list-style-type: none"> ○ Bottled water ○ Hydration drinks (i.e. Gatorade®, Powerade®)

Personal Care Products (PCPs) - for day of sample collection⁶

● Prohibited	■ Allowable	▲ Needs Screening ²
<ul style="list-style-type: none"> • Any PCPs⁶, sunscreen, and insect repellent applied in the sampling area. 	<p>PCPs⁶, sunscreens, and insect repellents applied in the staging area, away from sampling bottles and equipment followed by thoroughly washing hands:</p> <p>PCPs⁶:</p> <ul style="list-style-type: none"> • Cosmetics, deodorants/antiperspirants, moisturizers, hand creams, and other PCPs⁶ <p>Sunscreens:</p> <ul style="list-style-type: none"> • Banana Boat® for Men Triple Defense Continuous Spray Sunscreen SPF 30 • Banana Boat® Sport Performance Coolzone Broad Spectrum SPF 30 • Banana Boat® Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 • Banana Boat® Sport Performance Sunscreen Stick SPF 50 • Coppertone® Sunscreen Lotion Ultra Guard Broad Spectrum SPF 50 • Coppertone® Sport High Performance AccuSpray Sunscreen SPF 30 • Coppertone® Sunscreen Stick Kids SPF 55 • L'Oréal® Silky Sheer Face Lotion 50 • Meijer® Clear Zinc Sunscreen Lotion Broad Spectrum SPF 50 • Meijer® Sunscreen Continuous Spray Broad Spectrum SPF 30 • Meijer® Clear Zinc Sunscreen Lotion Broad Spectrum SPF 15, 30 and 50 • Meijer® Wet Skin Kids Sunscreen Continuous Spray Broad Spectrum SPF 70 • Neutrogena® Beach Defense Water+Sun Barrier Lotion SPF 70 • Neutrogena® Beach Defense Water+Sun Barrier Spray Broad Spectrum SPF 30 • Neutrogena® Pure & Free Baby Sunscreen Broad Spectrum SPF 60+ • Neutrogena® UltraSheer Dry-Touch Sunscreen Broad Spectrum SPF 30 <p>Insect Repellents:</p> <ul style="list-style-type: none"> • OFF® Deep Woods • Sawyer® Permethrin 	<ul style="list-style-type: none"> • Products other than those listed as <ul style="list-style-type: none"> ■ Allowable

¹ This table is not considered to be a complete listing of prohibited or allowable materials. All materials should be evaluated prior to use during sampling. The manufacturers of various products should be contacted in order to determine if PFAS was used in the production of any particular product.

² Equipment blank samples should be taken to verify these products are PFAS-free prior to use during sampling.

³ **For surface water foam samples:** LDPE storage bags may be used in the sampling of foam on surface waters. In this instance, it is allowable for the LDPE bag to come into direct contact with the sample media.

⁴ **For fish and other wildlife samples:** Depending on the project objectives, glass jars and aluminum foil might be used for PFAS sampling. PFAS has been found to bind to glass and if the sample is stored in a glass jar, a rinse of the jar is required during the sample analysis. PFAS are sometimes used as a protective layer for some aluminum foils. An equipment blank sample should be collected prior to any aluminum foil use.

⁵ Regular ice is recommended as there are concerns that chemical and blue ice may not cool and maintain the sample at or below 42.8°F (6°C) (as determined by EPA 40 CFR 136 – NPDES) during collection and through transit to the laboratory.

⁶ Based on evidence, avoidance of PCPs is considered to be precautionary because none have been documented as having cross-contaminated samples due to their use. However, if used, application of PCPs must be done at the staging area and away from sampling bottles and equipment, and hands must be thoroughly washed after the use of any PCPs prior to sampling.