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U.S. Environmental Protection Agency
Science and Ecosystem Support Division
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OPERATING PROCEDURE

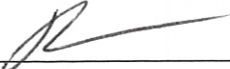
Title: Field Equipment Cleaning and Decontamination at the FEC

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Authors

Name: Brian Striggow
Title: Environmental Engineer

Signature:  **Date:** 12-18-15

Approvals

Name: John Deatruck
Title: Chief, Field Services Branch

Signature:  **Date:** 12/18/15

Name: Hunter Johnson
Title: Field Quality Manager, Science and Ecosystem Support Division

Signature:  **Date:** 12/18/15

Revision History

The top row of this table shows the most recent changes to this controlled document. For previous revision history information, archived versions of this document are maintained by the SESD Document Control Coordinator on the SESD local area network (LAN).

History	Effective Date
<p>SESDPROC-206-R3, <i>Field Equipment Cleaning and Decontamination at the FEC</i>, replaces SESDPROC-206-R2.</p> <p>Cover Page: The author was changed to Brian Striggow. SESD's reorganization was reflected in the authorization section by making John Deatrick the Chief of the Field Services Branch. The FQM was changed from Bobby Lewis to Hunter Johnson.</p> <p>Revision History: Changes were made to reflect the current practice of only including the most recent changes in the revision history.</p> <p>General: Corrected any typographical, grammatical and/or editorial errors.</p> <p>Section 5.6: Deleted section for obsolete or rarely used mixing rod.</p> <p>Section 6.2: Deleted cleaning of new Teflon® tubing consistent with current practice.</p> <p>Section 7.3: Added Monsoon® and Geosub® pump cleaning procedure.</p> <p>Section 7.4: Added bladder pump cleaning procedure.</p> <p>Differentiated between use of Luminox and Liquinox detergents throughout procedure consistent with current practice.</p>	December 18, 2015
<p>SESDPROC-206-R2, <i>Field Equipment Cleaning and Decontamination at the FEC</i>, replaces SESDPROC-206-R1.</p>	December 20, 2011
<p>SESDPROC-206-R1, <i>Field Equipment Cleaning and Decontamination at the FEC</i>, replaces SESDPROC-206-R0.</p>	November 1, 2007
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1 General Information

1.1 Purpose

This document describes general and specific procedures, methods and considerations to be used and observed when cleaning and decontaminating sampling equipment at the SESD Field Equipment Center (FEC). For the purpose of this procedure, decontamination refers to the removal of contaminants from sampling, drilling and other field equipment to concentrations that do not impact study objectives.

1.2 Scope/Application

Decontamination procedures outlined in this document are intended for use at the FEC for decontaminating sampling and other field equipment. These procedures are not intended to be used in the field. Procedures for use in the field are found in the SESD Operating Procedure for Field Equipment Cleaning and Decontamination, SESDPROC-205. Mention of trade names or commercial products in this operating procedure does not constitute endorsement or recommendation for use.

Sampling and other field equipment decontaminated in accordance with these procedures will meet the minimum requirements for Data Quality Objective (DQO) Definitive Data Collection. Site-specific alterations to these procedures will be approved by the project leader and the SESD Field Quality Manager, and they will be transmitted in writing to FEC personnel. This transmittal will be documented by the Project Leader in the associated SESD project file for the field investigation. The deviations will also be documented in the Quality Assurance Project Plan (QAPP) prepared for the investigation.

1.3 Documentation/Verification

This procedure was prepared by persons deemed technically competent by SESD management, based on their knowledge, skills and abilities and have been tested in practice and reviewed in print by a subject matter expert. The official copy of this procedure resides on the SESD Local Area Network (LAN). The Document Control Coordinator (DCC) is responsible for ensuring the most recent version of the procedure is placed on the LAN and for maintaining records of review conducted prior to its issuance.

1.4 Definitions

- Deionized water: Tap water that has been treated by passing through a standard deionizing resin column. At a minimum, the finished water should contain no detectable heavy metals or other inorganic compounds (i.e., at or above analytical detection limits) as defined by a standard inductively coupled Argon Plasma Spectrophotometer (ICP) (or equivalent) scan. Deionized water

obtained by other methods is acceptable, as long as it meets the above analytical criteria. Organic-free water may be substituted for deionized water.

- Detergent shall be a standard brand of phosphate-free laboratory detergent such as Liquinox® or Luminox®. Liquinox® is a traditional anionic laboratory detergent and is used for general cleaning and where there is concern for the stability of the cleaned items in harsher cleaners. Luminox® is a specialized detergent with the capability of removing oils and organic contamination. It is used in lieu of a solvent rinse step in FEC cleaning of equipment for trace contaminant sampling.
- Nitric acid solution (10%) shall be made from reagent-grade nitric acid and deionized water. Nitric acid solutions used to clean equipment cannot be reused.
- Organic-free water: Tap water that has been treated with activated carbon and deionizing units. At a minimum, the finished water must meet the analytical criteria of deionized water and it should contain no detectable pesticides, herbicides, or extractable organic compounds, and no volatile organic compounds above minimum detectable levels as determined by the Region 4 laboratory for a given set of analyses. Organic-free water obtained by other methods is acceptable, as long as it meets the above analytical criteria.
- Solvents (e.g., pesticide-grade isopropanol or other solvents) may be used for a particular investigation if needed. Pesticide-grade acetone or methanol are acceptable. However, it should be noted that if pesticide-grade isopropanol or acetone is used, the detection of acetone in samples collected with solvent rinsed equipment is considered suspect. Pesticide-grade methanol is much more hazardous to use than either pesticide-grade acetone or isopropanol, therefore its use is discouraged. Solvents used to clean equipment cannot be reused. A solvent rinsing step has in the past been a standard part of cleaning equipment for trace contaminant sampling. This step has been eliminated for most equipment cleaning and has been replaced with an initial washing in Luminox® detergent.
- Tap water is water from any potable water supply. Deionized water or organic-free water may be substituted for tap water.

1.5 References

SESD Operating Procedure for Field Equipment Cleaning and Decontamination, SESDPROC-205, Most Recent Version

US EPA. Safety, Health and Environmental Management Program Procedures and Policy Manual. Region 4 SESD, Athens, GA, Most Recent Version

1.6 General Precautions

1.6.1 Safety

Proper safety precautions must be observed when field cleaning or decontaminating dirty sampling equipment. Refer to the SESD Safety, Health and Environmental Management Program (SHEMP) Procedures and Policy Manual and any pertinent site-specific Health and Safety Plans (HASP) for guidelines on safety precautions. These guidelines, however, should only be used to complement the judgment of an experienced professional. Some materials used to implement the decontamination procedures outlined in this procedure are harmful if used improperly. Caution should be exercised and all applicable safety procedures shall be followed. At a minimum, the following precautions shall be taken in the washroom during these operations:

- Safety glasses with splash shields or goggles, gloves and safety boots will be worn during all decontamination operations. A neoprene apron and neoprene gloves are also required during acid rinsing.
- All solvent rinsing operations will be conducted under a fume hood or in the open (never in a closed room).
- No eating, smoking, drinking, chewing, or any hand to mouth contact shall be permitted during decontamination operations.

1.6.2 Procedural Precaution

After decontamination, equipment should be handled only by personnel wearing clean latex gloves to prevent re-contamination.

After the decontaminated equipment is wrapped in aluminum foil and sealed in plastic, the date that the equipment was decontaminated should be written on the plastic. If the equipment was not decontaminated according to this operating procedure, this should also be noted on the plastic. Sampling equipment and or

containers must be transported/stored separate from gasoline, oil, grease, solvents, pesticides or any other possible contaminant.

When equipment and containers used to collect samples containing oil, grease, or other hard to remove materials cannot be decontaminated using any of the procedures described in this document, they should be disposed of properly.

2 Introduction to Equipment Cleaning and Decontamination

2.1 General

Procedures included in this operating procedure are intended for use by FEC personnel for decontaminating sampling equipment. Sampling and field equipment decontaminated in accordance with these procedures must meet the minimum requirements for the Data Quality Objectives (DQOs) of the study or investigation.

2.2 Handling Practices and Containers for Decontamination Solutions

Improperly handled decontamination solutions may easily become contaminated. Containers should be constructed of the proper materials to ensure their integrity. Following are the materials to be used for storing the specified decontamination materials:

- Detergent should be kept in clean containers until use. It should be poured directly from the container.
- Solvents should be stored in the unopened original containers until used. Solvents may be applied using the low pressure nitrogen system fitted with a Teflon® nozzle, or by using Teflon® squeeze bottles.
- Tap water may be kept in tanks, squeeze bottles or applied directly from a hose.
- Deionized water should be stored in cleaned containers that can be closed when not being used. It may be applied from squeeze bottles.
- Organic-free water should be stored in cleaned glass, Teflon® or stainless steel containers prior to use. It may be applied using Teflon® squeeze bottles, or directly from the system.
- Nitric acid should be kept in the glass container it is received in, and placed in squeeze bottles prior to application.

2.3 Disposal of Spent Decontamination Solutions

Procedures for safe handling and disposition of spent decontamination solutions, including washwater, rinse water, spent acid solutions, and spent solvents are as follows:

Washwater/Rinsewater: Waters from equipment decontamination at the FEC may be disposed in the sanitary drain in the washroom. When large equipment (vehicles, augers, etc.) is washed or rinsed outside, it may go onto the ground without recovery.

Nitric Acid: Nitric acid decontamination solutions are to be diluted to a pH greater than 2.0, and flushed down the sanitary drain in the washroom.

Solvent: All solvents used should be captured, properly labeled, and stored on the premises of the FEC until arrangements for proper disposal are made. Used solvents can be classified as either "solvent for recovery" or "solvent for disposal." Solvent for recovery is that which was used at the FEC for decontamination of equipment. Solvent used for decontaminating badly contaminated equipment (e.g., tar removal, etc.) should be designated for disposal. The two groups should be labeled "For Recovery" or "For Disposal" and stored separately at the FEC. As solvents are rarely used for equipment cleaning at the FEC, it may not be practicable to recover the spent solvents.

2.4 Initial Processing of Returned Equipment

Field or sampling equipment that needs to be repaired will be identified with a "repair" tag. Any problems encountered with the equipment and specific required repairs shall be noted on this tag, as well as the date and the initials of the investigator. Field equipment or reusable sample containers needing decontamination or repairs will not be stored with clean equipment, sample tubing, or sample containers.

All unused plastic wrapped equipment, containers, and tubing will be examined when the equipment is returned from the field. Any items for which the plastic wrapping is not torn or soiled may be placed back into stock.

3 Sampling Equipment Used for Sampling of Trace Organic and Inorganic Constituents

Sampling equipment used to collect samples undergoing trace organic and/or inorganic constituent analyses should be thoroughly decontaminated. The following procedures are to be used.

3.1 Standard FEC Decontamination Procedure

1. Wash equipment thoroughly with Luminox® detergent and hot tap water using a brush or scrub pad to remove any particulate matter or surface film.
2. Rinse equipment thoroughly with hot tap water.
3. Rinse equipment thoroughly with organic-free water.
4. Allow to air dry for at least 24 hours.
5. Wrap equipment in one layer of aluminum foil. Roll edges of foil into a "tab" to allow for easy removal. Seal the foil wrapped equipment in plastic and label.

3.2 Procedures for Decontaminating Glass Pans at the FEC

1. Wash equipment thoroughly with Luminox® detergent and hot tap water using a brush or scrub pad to remove any particulate matter or surface film.
2. Rinse equipment thoroughly with hot tap water.
3. Rinse equipment with 10 percent nitric acid solution. Fresh nitric acid solution should be prepared for each decontamination session.
4. Rinse equipment thoroughly with organic-free water.
5. Allow to air dry for at least 24 hours.
6. Wrap equipment in one layer of aluminum foil. Roll edges of foil into a "tab" to allow for easy removal. Seal the foil wrapped equipment in plastic and label.

4 Equipment Used for Sample Collection for Perfluorinated Compound Analyses

4.1 General

Decontamination of equipment used for collection of perfluorinated compound analyses is subject to all the general procedures found in Section 1 of this procedure. Special decontamination procedures, however, are required for perfluorinated compound sampling and decontamination to eliminate the possibility of interference from Teflon®, present as a component in materials used for storage or application of decontamination solutions for SESD's routine decontamination activities. The following procedures, reflecting an absence of Teflon® materials, are to be used.

4.2 Containers for Decontamination Solutions

Improperly handled cleaning solutions may easily become contaminated. Storage and application containers must be constructed of the proper materials to ensure their integrity. Following are acceptable materials used for containing the specified cleaning solutions:

- Detergent must be kept in clean plastic, metal, or glass containers until used. It should be poured directly from the container during use.
- Tap water may be kept in tanks, hand pressure sprayers, squeeze bottles, or applied directly from a hose.
- Deionized water must be stored in clean, glass or plastic containers that can be closed prior to use. It can be applied from plastic squeeze bottles.
- Solvents must be stored in clean, glass or high density polyethylene (HDPE) containers that can be closed prior to use. It can be applied from plastic squeeze/spray bottles provided that containers have been demonstrated to meet the DQO's of the study.

4.3 Decontamination Procedure for Equipment used for Sample Collection for Perfluorinated Compounds (PFCs)

For samples undergoing trace PFCs analyses, the following procedures are to be used for all sampling equipment or components of equipment that come in contact with the sample:

1. Clean with tap water and Luminox® detergent using a brush, if necessary, to remove particulate matter and surface films.
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with deionized water.

4. Triple rinse with methanol.
5. Place on a clean surface to air-dry.
6. If the equipment is to be stored overnight, it should be covered and secured with clean, unused plastic sheeting.

5 Automatic Wastewater Sampling Equipment

5.1 Automatic Samplers

1. The exterior and accessible interior (excluding the waterproof timing mechanism) portions of the automatic samplers will be washed with Liquinox® detergent and tap water then rinsed with tap water.
2. Desiccant in the flow meters should be checked and replaced, if necessary, each time the equipment is decontaminated.
3. The face of the timing case mechanism will be cleaned with a clean damp cloth.
4. Tubing (sample intake and pump tubing) will be discarded after each use and new Silastic® pump tubing will be installed.

5.2 Distributor Arm

1. Clean with hot tap water, Liquinox® detergent, and a brush.
2. Rinse thoroughly with deionized water.
3. Replace in sampler.

5.3 All Automatic Sampler Headers

1. Disassemble header and using a bottle brush, wash with Liquinox® detergent and hot tap water.
2. Rinse thoroughly with deionized water.
3. Dry thoroughly, then reassemble header and wrap with aluminum foil.
4. Seal in plastic.

5.4 Reusable Composite Sample Containers

1. Wash containers thoroughly with Liquinox® detergent and hot tap water, using a bottle brush to remove particulate matter and surface film.
2. Rinse containers thoroughly with hot tap water.

3. Rinse containers with 10 percent nitric acid.
4. Rinse containers thoroughly with tap water.
5. Rinse containers thoroughly with deionized water.
6. Air dry.
7. Cap with aluminum foil or Teflon® film.

5.5 Glass Sequential Bottles for GC/MS Analyses

1. Rinse with 10 percent nitric acid.
2. Rinse thoroughly with tap water.
3. Wash using Luminox® detergent, followed by tap and deionized water rinses.
4. Air dry.
5. Replace in covered, automatic sampler base; cover with aluminum foil for storage and mark the base as follows: "Cleaned for organic analyses."

6 Procedures for Tubing

6.1 Silastic® Pump Tubing

The Silastic® pump tubing in the automatic samplers and peristaltic pumps should be replaced after each study. After installation, the exposed ends should be capped with clean, unused aluminum foil.

6.2 Teflon® Sample Tubing

Tubing rolls which have been QC sampled by lots and determined to be contaminant-free per SESDPROC(011) Field Sampling Quality Control, can be used without further consideration.

An inventory of Teflon® tubing precut to appropriate lengths (e.g., 15, 25, or 35 foot) shall be maintained for convenience. The precut tubing will be wrapped in aluminum foil and sealed in plastic.

7 Procedures for Miscellaneous Equipment

7.1 Well Sounders or Tapes

1. Wash with Liquinox® detergent and tap water.
2. Rinse with hot tap water.
3. Rinse with deionized water.
4. Allow to air dry overnight.

7.2 Grundfos Redi-Flo2® Pump

CAUTION – Do not wet the controller. Always disconnect power from the pump when handling the pump body.

Controller Box Decontamination:

1. Wipe the controller box with a damp cloth. Immediately remove any excess water.
2. Let the controller box dry completely.

Pump Decontamination:

Materials:

Standard FEC cleaning materials

Valved hose wye fitting

Pressure gauge (0-150psi)

Large screwdriver or quarter for motor plug

Hex wrench for bottom motor housing bolts

Small screwdriver for screen screw

1. Remove check valves and adapter fittings and clean separately.
2. Remove intake screen retaining screw and slide upward off pump.
3. Inspect electrical cable near pump intake for chafing, breaks, and exposed conductors. If repair is required, perform rudimentary cleaning of pump, reassemble, and red-tag for repair.
4. Unscrew turbine housing from top of pump and remove turbine assembly from housing. Disassemble turbine assembly and clean all parts as per procedures for general sampling equipment.

5. Remove bottom plug from motor. Remove the three screws from bottom of pump housing with hex wrench, remove bottom motor cover and slide rotor out of motor casing. Red-tag motor for seal repair if excess grit or dirt in motor case is present. Wash motor case, rotor, and bottom components in Luminox® detergent and rinse with tap and DI water.
6. Invert motor housing and slide rotor into housing. Fill motor housing with organic-free water while jogging rotor up and down to release trapped air. Reassemble bottom of motor housing and tighten screws.
7. Finish filling motor housing with organic-free water while continuing to jog rotor up and down. Replace plug in lower housing while exercising care to not capture air in housing. If water leaks out of seal at the turbine end of the motor housing while filling, red-tag motor for seal repair.
8. Reassemble turbine assembly per Grundfos diagrams, and replace intake screen and screw.
9. Perform operations check of pump in plastic bucket of water. Do not touch pump or bucket while pump is connected to controller. With pump at maximum RPM, test for visual indication of free flow and lack of excessive noise or vibration. Connect pump outlet to a wye fitting and pressure gauge. After bleeding air out of pump from open end of wye, test for zero-flow 'deadhead' pressure at half and full speed on Grundfos pump curves. If pump fails to meet 75% of 'deadhead' ratings or generates excessive noise, red-tag pump for repair. (Pressure in psi = -head on ratings curve / 2.31).
10. Clean cable and reel per standard procedures.
11. Perform final wash of pump by immersing and running pump in containers of Luminox®, tap water, and organic-free water. Conduct final rinse of pump with organic-free water over pump and through pump turbine.
12. Using a brush or scrub pad, clean the electrical cable with Luminox® detergent and then rinse with tap water and organic free water.
13. Completely air dry.
14. Place the pump in clean plastic bag.

To decontaminate the Redi-Flo2® ball check valve:

1. Remove the ball check valve from the pump head. Check for wear and/or corrosion, and replace as needed.
2. Using a brush, scrub all components with detergent and tap water.
3. Rinse with organic-free water.

4. Completely air dry.

7.3 Mega-Monsoon® and GeoSub® Electric Submersible Pump

Materials:

Standard FEC cleaning materials

Motor head wrench (Monsoon)

Valved hose wye fitting and pump adapter.

Pressure gauge (0-150psi)

1. Remove check valves and adapter fittings and clean separately.
2. Inspect electrical cable near pump intake for chafing, breaks, and exposed conductors. If repair is required, perform rudimentary cleaning of pump, reassemble, and red-tag for repair.
3. Remove the outer motor housing by holding the top of the pump head with a wrench and then unscrewing and pulling the outer housing from its O-ring seat.
4. Clean all pump components per the provisions of section 3.1. Use a small bottle brush for the pump head passages
5. Wet the O-ring with organic-free water. Reassemble the outer pump housing to the pump head.
6. Perform operations check of pump in plastic bucket of water. With pump at maximum RPM, test for visual indication of free flow and lack of excessive noise or vibration. Connect pump outlet to a wye fitting and pressure gauge. After bleeding air out of pump from open end of wye, test for zero-flow 'deadhead' pressure at half and full speed on the relevant pump curves. If pump fails to meet 75% of 'deadhead' ratings or generates excessive noise, red-tag pump for repair. (Pressure in psi = pressure head on ratings curve / 2.31).
7. Clean cable and reel per Section 3.1.
8. Perform final wash of pump by immersing and running pump in containers of Luminox®, tap water, and organic-free water. Conduct final rinse of pump with organic-free water over pump and through pump turbine.

7.4 Bladder Pumps

The Geotech® bladder pump and Geoprobe Systems® mechanical bladder pump can be cleaned similarly.

1. Discard any tubing returned with the pump.
2. Completely disassemble the pump, being careful to note the initial position of and retain any loose ball checks.

3. Discard pump bladder.
4. Clean all parts as per the standard cleaning procedure in Section 3.1.
5. Install a new Teflon® bladder and reassemble pump.

7.5 Direct Push Rig, Grout Mixer, and Associated Equipment

Upon return to the FEC, direct push equipment must be cleaned, as follows:

A thorough cleaning of the direct push rig is required at the end of each study. At a minimum, the rig should be cleaned with a pressure sprayer.

Direct push tooling (hand tools, adapters etc.) other than sampling tools shall be decontaminated as below. Sampling equipment such as screen point samplers and piston samplers should be cleaned per the general provisions of Section 3.1:

1. Inspect thoroughly. If severe rust, corrosion, paint, or hardened grout is present the equipment may require sandblasting prior to decontamination.
2. Wash with tap water and Luminox® detergent, using a brush if necessary, to remove particulate matter and surface films. Pressure spraying or a power wire brush (high pressure hot water with detergent) may be necessary to remove matter that is difficult to remove. Direct Push equipment that has been cleaned outdoors should be placed on racks or saw horses at least two feet above ground. Hollow tooling should be decontaminated on the inside and outside.
3. Rinse thoroughly with tap water.
4. Let completely air dry. Remove and cover with clean, unused plastic and label.

At the direction of the project leader or Quality Assurance Officer, this equipment may be decontaminated as specified in Section 3.1 prior to use.

7.6 Field Analytical Equipment

Field instruments for in-situ water analysis should be wiped with a clean, damp cloth or sponge. The probes on these instruments (pH, conductivity, DO, etc.), should be rinsed with deionized water and air dried.

Any desiccant in these instruments should be checked and replaced, if necessary, each time the equipment is decontaminated.

7.7 Ice Chests and Shipping Containers

Ice chests and reusable containers shall be washed with Liquinox® detergent (interior and exterior) and rinsed with tap water and air dried before storage. If, in the opinion of the field investigators, the container is severely contaminated with concentrated waste or other toxic material, it shall be cleaned as thoroughly as possible, rendered unusable, and properly disposed.

7.8 Organic-Free Water and Deionized Water Glass Storage Containers

NOTE: This section applies to reusable containers such as glass carboys. These containers should be used only for transporting organic-free or deionized water. Sample containers that have been QA-verified may be used for this purpose without further cleaning.

1. Wash containers thoroughly (interior and exterior) with hot tap water and Luminox® detergent, using a bottle brush to remove particulate matter and surface film.
2. Rinse containers thoroughly with hot tap water.
3. Rinse containers with 10 percent nitric acid.
4. Rinse containers thoroughly with tap water.
5. Rinse containers thoroughly with deionized water.
6. Allow to air dry and secure with tightly fitting cap.

When transporting organic-free and deionized water to the field, use only containers cleaned as specified above. Label the container as "organic-free water" or "deionized water" and include the date it was prepared.

7.9 SCBA Facemasks

CAUTION: Facemasks should be inspected for wear or damage. If, after consultation with the Safety Officer, the facemask cannot be repaired, it should be discarded.

1. Wash facemask thoroughly inside and out with hot tap water and Liquinox® detergent. Use only soft brushes. Do not use scouring pads of any type.

2. Rinse facemask thoroughly inside and out with tap water.
3. Hang facemask up until completely dry.
4. Place facemask in plastic bag and return to SCBA case.

APRs are completely dismantled prior to cleaning. Then Steps 1 - 3 for SCBA facemasks are used. When completely dry, the APR is reassembled and placed in a plastic bag.

7.10 Garden Hose

1. Brush and wash exterior with Liquinox® detergent and tap water
2. Rinse with tap water.
3. Flush interior with tap water until clear (minimum of one gallon) and drain.
4. Let completely air dry.
5. Coil and place in clean plastic bag.
7. Potable water (white NSF) hoses should be segregated from other hoses.

7.11 Portable Tanks for Tap Water

1. Scrub exterior and interior to the extent possible with Liquinox® detergent and tap water.
2. Rinse with tap water.
3. Let completely air dry.
4. Close and store.

7.12 Vehicles

Field investigators are responsible for keeping field vehicles clean by removing trash and other debris. If warranted, based on an evaluation of the type and degree of contamination present, contaminated trash and equipment will be kept separate from ordinary trash and will be properly disposed on-site or upon return.

Vehicles that become contaminated during the course of the field investigation will be washed (and cleaned on the inside, as appropriate) at the conclusion of each field trip. It will be the responsibility of the field investigators to see that this procedure is followed. This should minimize contamination of equipment or samples due to contamination of vehicles.

8 Preparation of Disposable Sample Containers

8.1 Introduction

No disposable sample container may be reused. All disposable sample containers will be stored in their original packing containers. When packages of uncapped sample containers are opened, they will be placed in new plastic garbage bags and sealed to prevent contamination during storage.