Sampling Plan for
Wastewater, Sludge, Storm Water, and Drinking Water

National Aeronautics and Space Administration

Goddard Space Flight Center

Wallops Flight Facility

Wallops Island, Virginia

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Table of Contents

1 Virginia Pollutant Discharge Elimination System 1-1

1.1 Purpose 1-1

1.2 System Overview 1-1

1.3 Wastewater Samples 1-2

1.3.1 Sample Collection 1-2

1.3.2 Sampling Frequency 1-2

1.3.3 Reporting 1-2

1.4 Sludge Samples 1-4

1.4.1 Sample Collection 1-4

1.4.2 Sampling Frequency 1-4

1.4.3 Reporting 1-4

1.5 Stormwater Samples 1-4

1.5.1 Sample Collection 1-4

1.5.2 Sampling Frequency 1-5

1.5.3 Non-compliance Sampling 1-5

1.5.4 Reporting 1-5

2 Drinking Water Sampling Plan 2-1

2.1 Purpose 2-1

2.2 System Overview 2-1

2.3 Drinking Water Samples 2-2

2.3.1 Sample Collection 2-2

2.3.2 Sampling Frequency 2-2

2.3.3 Non-compliance Sampling 2-2

2.3.4 Reporting 2-6

3 Sample Handling and Analysis 3-1

3.1 Sample Handling 3-1

3.2 Analysis 3-1

Appendix A 40 CFR Part 136, Table 2 (List of Preservatives)
Appendix B DCLS Drinking Water Sampling Guide
Appendix C Wallops Organizational Emergency and Environmental Points of Contact
Appendix D WFF Line Break Form
Appendix E Line Break Guidance Documents
Appendix F WFF Line Break Signs

Table of Tables

Table 1-1 Effluent Limitations for Outfall 001 with Reporting Requirements 1-3
Table 1-2 Effluent Limitations for Stormwater Outfalls with Reporting Requirements 1-1
Table 2-1 NASA Operated Wells Located on Main Base and Wallops Mainland 2-1
Table 2-2 NASA WFF Bacteriological Sampling Schedule 2-3
Table 2-3 NASA WFF Bacteriological Sampling Sites 2-4
Table 2-4 Drinking Water Chemical Sampling Schedule 2-5

List of Acronyms

$CBOD_5$	5 Day Carbonaceous Biochemical Oxygen Demand
DCLS	(Virginia) Division of Consolidated Laboratory Services
DEQ	(Virginia) Department of Environmental Quality
DMR	Discharge Monitoring Report
E. coli	Escherichia coli
EPA	(United States) Environmental Protection Agency
FOTW	Federally Owned Treatment Works
HAA5	Haloacetic Acids
MG	Millions of Gallons
mg/L	Milligrams per liter
MGD	Millions of Gallons per Day
MPN	Most Probable Number
NA	Not Applicable
NASA	National Aeronautics and Space Administration
NELAC	National Environmental Laboratory Accreditation Certification
NOAA	National Oceanic and Atmospheric Administration
PWSID	Public Works System Identification
SOC	Synthetic Organic Chemicals

List of Acronyms

SWP3	Storm Water Pollution Prevention Plan
TPH	Total Petroleum Hydrocarbon
TNI	The NELAC Institute
TSS	Total Suspended Solids
TTHM	Total Trihalomethanes
µg/L	Micrograms per liter
VELAP	Virginia Environmental Laboratory Accreditation Program
VOCC	Volatile Organic Chlorinated Compounds
VPDES	Virginia Pollutant Discharge Elimination System
WFF	Wallops Flight Facility
WI	Wallops Island
WTP	Wastewater Treatment Plant

1 Virginia Pollutant Discharge Elimination System

1.1 Purpose

In the Commonwealth of Virginia, Department of Environmental Quality (DEQ) administers Virginia Pollutant Discharge Elimination System (VPDES) programs. A VPDES permit authorizes potential or actual discharge of pollutants from a point source to surface waters under prescribed conditions and limitations. VPDES Permit No. VA0024457 was first issued to Wallops Flight Facility (WFF) by the DEQ on August 17, 1989, with the most recent renewal date being September 2, 2014.

1.2 System Overview

The Federally Owned Treatment Works (FOTW) provides preliminary, secondary, and tertiary treatment, ultraviolet disinfection, and sludge. Preliminary treatment includes grit removal, bar screens, and comminutors. Secondary treatment is accomplished by biological treatment, extended aeration of activated sludge, and secondary clarification. Tertiary treatment is accomplished by sand filtration. Prior to discharge, an ultraviolet system provides disinfection and a post aeration system provides additional dissolved oxygen. Sewage sludge is aerobically digested, dried in Building D-053 on covered sludge drying beds, tested annually for Resource Conservation and Recovery Act (RCRA) residual metals, and disposed of at the Accomack County North Landfill in accordance with WFF's approved Sludge Management Plan (revised annually). WFF disposes of approximately 10 metric tons of dried sewage sludge per calendar year.

Sludge at the Federally Owned Treatment Works (FOTW) at NASA Goddard Space Flight Center's Wallops Flight Facility (WFF) sludge drying beds in Building D-53 must be tested annually under Virginia Pollution Discharge Elimination System (VPDES) Permit VA0024457 for metals listed in 9 VAC 25-31-540 prior to disposal as a non-hazardous waste. Through aerobic digestion in conjunction with the dewatering processes of the sludge drying beds, the sludge meets the requirements to achieve Class B alternative 2 Pathogen Control under 40 CFR Part 503. This non-hazardous sludge is disposed of by WFF at the Accomack County North Landfill.

The FOTW has a design capacity of approximately 1.1 x 10^6 liters per day or 300,000 gallons per day. The current average daily discharge is approximately 189,000 to 227,000 liters (50,000 to 60,000 gallons).

The discharge point from the FOTW is designated by the VPDES permit as Outfall 001. The receiving stream is an unnamed tributary of Little Mosquito Creek. The effluent limitations established by the VPDES permit are summarized in Table 1-1. Sampling technique and frequency for wastewater analyses is established in accordance with the VPDES permit.

The VPDES permit (VA0024457) includes 11 industrial storm water outfalls (Outfalls 003-010, 012-014) on the NASA Main Base and four non-industrial storm water outfalls (Outfalls 021-024) located on NOAA property. It also includes three industrial storm water outfalls (037 –

039) and five non-industrial storm water outfalls (031 – 036), located on Wallops Island. A description of each monitored outfall and its receiving stream can be found in the Storm Water Pollution Prevention Plan (SWP3). The SWP3 identifies all stormwater discharges at WFF facility and includes actual and potential sources of stormwater contamination, and the implementation of both structural and non-structural best management practices to reduce the impact of stormwater runoff on the receiving stream to the maximum extent practicable, and to meet water quality standards.

1.3 Wastewater Samples

1.3.1 Sample Collection

PPE: disposable nitrile gloves, safety glasses

Grab samples are collected from the final discharge point in Building D-050 in laboratory containers, using a specialized sampling arm. Composite samples are also collected from the final discharge point by refrigerated automatic sampler, configured according to manufacturer's instructions to sample once per hour for approximately 24 hours. Composite sample is then portioned into laboratory-provided containers for each required analyte. Each required analyte, as well as its sampling frequency, are included in the permit and included for easy reference in Table 1-1.

Containers, sampling holding times, and preservatives (both thermal and chemical) appropriate for each required analyte can be found highlighted in Appendix A. Care must be taken to not overfill sample containers pre-filled with chemical preservatives.

1.3.2 Sampling Frequency

Wastewater treatment plant (WTP) operators monitor pertinent plant information and collect and test various in-house samples, for parameters such as alkalinity and settling time, to assure the effective operation of the WTP.

Operators also collect compliance samples from Outfall 001, at the frequency specified in Table 1-1. Laboratory personnel are also trained on compliance sampling procedures, in the event that samples cannot be collected by the WTP operators.

Laboratory personnel collect annual grab samples from the WTP for the next VPDES permit renewal data call, which are analyzed for ammonia, total residual chlorine, dissolved oxygen, Total Kjeldahl Nitrogen, nitrate/nitrite, oil and grease, phosphorus, and total dissolved solids.

1.3.3 Reporting

Lab personnel submit reports of analysis to NASA for every accredited wastewater analysis performed. The laboratory prepares the discharge monitoring report (DMR) for NASA, who submit the DMR to the Virginia DEQ by the 10th of the month following the monitoring period.

Table 1-1 Effluent Limitations for Outfall 001 with Reporting Requirements

Effluent Characteristics	Discharge Limitations for Outfall 001 (Design Flow 0.3 MGD)				Monitoring Requirements	
	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	0.3	NA	NA	NL	Continuous	Totalizing, Indicating and Recording Equipment
pH (standard units)	NA	NA	6.0	9.0	1/day	Grab
Five-day Carbonaceous Biochemical Oxygen Demand [$CBOD_5$] (mg/l; kg/d)	10; 11	15; 17	NA	NA	3 days/week	24-Hr Composite
Total Suspended Solids [TSS] (mg/l; kg/d)	10; 11	15; 17	NA	NA	3 days/week	24-Hr Composite
Dissolved Oxygen (mg/l)	NA	NA	5.5	NA	1/day	Grab
Fecal Coliform (MPN/100ml)	200	NA	NA	NA	3 days/week (10AM to 4PM)	Grab
E. coli (MPN/100ml)	126	NA	NA	NA	3 days/week (10AM to 4PM)	Grab
Total Kjeldahl Nitrogen [TKN] (mg/l; kg/d)	3.0; 3.4	4.5; 5.1	NA	NA	3 days/week	24-Hr Composite
Total Recoverable Copper (µg/l)	19	19	NA	NA	1/month	24-Hr Composite

MGD - million gallons per day; MPN – most probable number; mg/l – milligrams per liter; kg/d – kilograms per day; µg/l – micrograms per day; NL - No Limit, however, reporting is required; NA - Not Applicable

1.4 Sludge Samples

1.4.1 Sample Collection

PPE: disposable nitrile gloves, safety glasses

Sludge samples are taken as a composite of ten individual grab samples randomly distributed through the drying bed. Grab sites are selected by, first, dividing the bed with an imaginary grid, and then randomly selecting ten regions. Small grab samples are taken from each region, using a clean stainless steel shovel. Samples are combined and thoroughly mixed in a stainless steel or plastic bowl. Sample is transferred to a 1-liter wide-mouth glass jar for submission to laboratory. Decontaminate shovel and bowl, prior to re-use or storage, with Tergajet (or other suitable laboratory detergent) followed by three rinses with deionized water; alternatively, use disposable sampling equipment.

1.4.2 Sampling Frequency

Laboratory personnel collect annual sludge samples each spring, after sludge is dry, from all beds currently in-use for toxicity characteristic leaching procedure (TCLP) metals analysis.

1.4.3 Reporting

Lab personnel submit reports of analysis to NASA for sludge analyses performed by its subcontract laboratory. The laboratory also prepares the sludge report for NASA, who submit the report to the Accomack County Public Works by the end of the calendar year.

1.5 Stormwater Samples

1.5.1 Sample Collection

PPE: disposable nitrile gloves, safety glasses, steel-toed boots, rain gear

Stormwater samples for laboratory analysis are collected during an isolated, substantial, stormwater discharge as soon as possible after the start of discharge. Per the permit, measurable rainfall cannot have occurred within 72 hours prior to the sampled rain event and the storm must produce at least 0.1 inches of rain. Grab samples are collected from the final discharge point at each stormwater outfall in laboratory containers, using a specialized sampling arm. Samples also must be taken at low tide to mitigate interferences from tidal waters. The sampling location, parameters and frequency of all outfalls requiring laboratory monitoring are included in the permit and included for easy reference in Table 1-2.

Containers, sampling holding times, and preservatives (both thermal and chemical) appropriate for each required analyte can be found highlighted in Appendix A. Care must be taken to not overfill sample containers pre-filled with chemical preservatives.

The laboratory also performs visual evaluations of stormwater discharge. Visual evaluations should be made within the first hour of stormwater discharge. Parameters to be evaluated are listed on the Stormwater Discharge Evaluation Form, found as an appendix in the NASA WFF Storm Water Pollution Prevention Plan, which includes color, odor, solids, and oil sheen.

1.5.2 Sampling Frequency

The laboratory collects compliance stormwater samples from Outfall 003, on the Main Base, every quarter and from Outfalls 037 and 038 on a semiannual basis.

All discharges from the industrial stormwater outfalls are also inspected for visual quality, at least on an annual basis. Outfalls 003, 004, 006, 008, 010, and 014 are inspected more frequently, on a quarterly basis. Outfalls 037-039 are also inspected more frequently, on a semiannual basis.

Outfall 039 is not currently sampled or monitored, as NASA does not discharge from this location; should discharges occur from this location, sampling and monitoring requirements are identical to Outfalls 037 and 038.

Laboratory personnel also collect grab samples, once every five years, from the stormwater outfalls listed in Table 1-2 for Form 2F of the next VPDES permit application, which are analyzed for oil and grease, biochemical oxygen demand, chemical oxygen demand, total suspended solids, total nitrogen, total phosphorus, and total petroleum hydrocarbons.

1.5.3 Non-compliance Sampling

The laboratory also utilizes automatic samplers (both discrete grab and composite samplers) and real-time field measurement devices (i.e., field pH meters) to monitor potential impacts of NASA's orbital class launches. These devices are set up according to the laboratory's autosampler work instruction and operated according to manufacturer's instructions. A minimum of one set of samples, per outfall monitored, is analyzed for its compliance monitoring parameters, as listed in Table 1-2.

1.5.4 Reporting

Lab personnel submit reports of analysis to NASA for every accredited stormwater analysis performed. The laboratory also prepares the discharge monitoring reports (DMR) for NASA, who submit the DMR to the Virginia DEQ by the 10th of the month following the monitoring period.

Visual inspections are compiled into the Comprehensive Site Compliance Evaluation report and included as appendices in the annual Storm Water Pollution Prevention Plan update.

Table 1-2 Effluent Limitations for Stormwater Outfalls with Reporting Requirements

Effluent Characteristics	Discharge Limitations for Outfall 003		Monitoring Requirements	
	Minimum	Maximum	Frequency	Sample Type
Flow (MG)	NA	NL	1/3 months	Estimate
pH (standard units)	6.0	9.0	1/3 months	Grab
Total Suspended Solids [TSS] (mg/l)	NA	NL	1/3 months	Grab
Total Petroleum Hydrocarbons [TPH] (mg/l)	NA	NL	1/3 months	Grab
Effluent Characteristics	**Discharge Limitations for Outfalls 037, 038, and 039**		**Monitoring Requirements**	
	Minimum	**Maximum**	**Frequency**	**Sample Type**
Flow (MG)	NA	NL	1/6 months	Estimate
pH (standard units)	6.0	9.0	1/6 months	Grab
Total Suspended Solids [TSS] (mg/l)	NA	NL	1/6 months	Grab
Total Petroleum Hydrocarbons [TPH] (mg/l)	NA	NL	1/6 months	Grab
Perchlorate (mg/l)	NA	1.4	1/6 months	Grab

MGD - million gallons per day; mg/l – milligrams per liter; kg/d – kilograms per day; µg/l – micrograms per day
NL - No Limit, however, reporting is required; NA - Not Applicable

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2 Drinking Water Sampling Plan

2.1 Purpose

In order to ensure that tap water is safe to drink, EPA and VDH prescribe regulations that limit the concentrations of certain contaminants in water provided by public water systems. At WFF, the water is regularly monitored for contaminants according to these regulations.

2.2 System Overview

NASA operates five supply wells on the WFF Main Base and two supply wells on the Mainland that serve both the Mainland and Wallops Island. These supply wells range from 120 to 220 feet deep (Table 2-1). On the Main Base, four wells withdraw water from the Middle Yorktown-Eastover aquifer and one well withdraws water from the Upper Yorktown-Eastover aquifer. On the Mainland, one well withdraws water from the Middle Yorktown-Eastover aquifer and one well withdraws water from the Upper Yorktown-Eastover aquifer.

Table 2-1 NASA Operated Wells Located on Main Base and Wallops Mainland

Well#	DEQ Well#	Depth (ft)	Pump Capacity (gpm)	Pump Set (ft)	Well Type	Well Status	Screen Interval(s) (ft)
Main Base Wells							
1	100-966	260	171	200	Production	Active	190-200, 210-220, 230-255
2	100-967	150	55	120	Production	Inactive	100-145
3	100-968	253	214	200	Production	Active	198-218, 223-248
4	100-969	265	163	220	Production	Active	220-260
5	100-970	260	260	175	Production	Inactive	190-250
Wallops Mainland Wells							
3	100-568	265	175	200	Production	Active	220-240, 245-255
4	100-844	260	275	180	Production	Active	195-215, 225-235

Water is stored within large ground storage tanks, where it is chlorinated to attenuate bacteria and viruses. Water is also treated with zinc orthophosphate, which prevents heavy metals, such as lead or iron, from leaching from the pipes and fixtures.

2.3 Drinking Water Samples

2.3.1 Sample Collection

PPE: disposable nitrile gloves

Samples are analyzed by drinking water operators using test kits approved by the VDH, according to the manufacturer's instructions, to assess dosing of hypochlorite and zinc orthophosphate throughout each distribution system.

Bacteriological samples are taken in sterile sample vessels provided by the laboratory. Sample containers without intact sterility seals should not be used. The sampling faucet is first flushed at full flow for three to five minutes. The water flow is adjusted to a slow, even stream and the free residual chlorine is tested with a test kit approved by the VDH, according to the manufacturer's instructions. The sterile vessel is then opened and slowly filled with sample until it is about a half-inch above the 100 mL line. The cap is immediately replaced and the vessel is tightly closed. Bleach may be used to disinfect the sampling faucet, after testing for free residual chlorine, in the event that contamination of the tap is suspected; however, the faucet must be flushed at full flow for another two to three minutes to assure no bleach is present on the tap during collection.

Other compliance drinking water samples are taken according to the instructions in the Drinking Water Sample Collection Guide, maintained by the Commonwealth of Virginia's Division of Consolidated Laboratory Services (DCLS) and included as Appendix B.

2.3.2 Sampling Frequency

Chlorine samples are taken by the operators every day at Buildings D-50, D-4, and N-162 on the Main Base and Buildings W-71, U-48, and Y-61 on Wallops Island. Orthophosphate samples are taken three times per week at Buildings D-50 and N-162 on the Main Base and Buildings W-71 and Y-61 on Wallops Island.

Bacteriological samples are collected by the laboratory each month in accordance with the schedule in Table 2-2. When routine samples are total coliform-positive, repeat sampling of both the routine site and its associated repeat sites in Table 2-3 is required within 24 hours of discovery.

Samples for chemical analyses are collected by the laboratory in accordance with the schedule in Table 2-4. Changes to the schedule may be imposed by the VDH, depending on historical compliance with the primary maximum contaminant limit.

2.3.3 Non-compliance Sampling

The laboratory collects samples for NASA in response to line breaks occurring in both distribution systems when the system has experienced a loss of pressure. The following procedure refers to the

appropriate points of contact, by title; the name and contact information for each can be found in Appendix C.

The laboratory is informed of line breaks directly from Facilities personnel or, indirectly, from the Environmental Office. Additional information about the break is provided by the contract Water/Wastewater Supervisor, which the laboratory uses to prepare the WFF Line Break Form (Appendix D). This information is then provided to the Water Program Manager, if not already aware, who works with Facilities points of contact to determine sampling requirements and water restrictions, in accordance with VDH regulations and the newest promulgated AWWA standards (AWWA C651-14, or more current). Excerpts from these regulations, applicable to WFF, can be found in Appendix E. Sampling options, promulgated by AWWA C651-14, are no samples (for breaks without a demonstrated loss of pressure), one sample (line breaks with demonstrated loss of pressure, repaired under sanitary conditions) or two samples (line breaks with demonstrated loss of pressure. sanitation conditions of repair uncertain). In the latter case, there are two options for collecting these two samples: take samples at least 16 hours apart, or take samples 15 minutes apart after, at least, a 16-hour rest period.

The Water Program Manager communicates the appropriate water restriction signage to the contract Water/Wastewater Supervisor and any affected tenants/partners, and signs are posted at all affected buildings. Signage templates are included in Appendix F. The Water/Wastewater Supervisor informs the laboratory and the Water Program Manager when repairs are complete and assists laboratory personnel with access requirements for restricted-access sampling sites. The Water Program Manager informs the laboratory of the sampling requirements and samples are taken, according to the sample collection procedures in Section 2.3.1.

Preliminary results are reported promptly to the Water Programs Manager; formal results are provided expediently, after completion of required quality assurance reviews. The laboratory adds the sample results into the WFF Line Break Form (Appendix D), which is then submitted to the Water Programs Manager for signature.

Table 2-2 NASA WFF Bacteriological Sampling Schedule

Months	VDH Designation	Sample Site
January, April, July, October	030	Building F-16
	040	Building E-105
	080	Building X-15
February, May, August, November	050	Building R-20
	060	Building R-10
	090	Building V-10
	010	Building E-2

March, June, September, December	020	Building F-160
	070	Building U-70

Table 2-3 NASA WFF Bacteriological Sampling Sites

PWSID 3001500 – NASA Wallops Flight Facility (Main Base)			
Routine Sample Site		**Repeat Water Sample Sites**	
010	Building E-2	01U	Building D-1
		01D	Building N-159
020	Building F-160	02U	Building F-1
		02D	Building N-133
030	Building F-16	03U	Building F-7
		03D	Building F-10
040	Building E-105	04U	Building E-104
		04D	Building E-108
050	Building R-20	05U	Building N-161
		05D	Building R-30
060	Building R-10	06U	Building N-162
		06D	Building Q-29
PWSID 3001500 – NASA Wallops Flight Facility (Main Base)			
Routine Sample Site		**Repeat Water Sample Sites**	
070	Building U-70	07U	Building U-55
		07D	Building U-30
080	Building X-15	08U	Building X-55
		08D	Building Y-60
090	Building V-10	09U	Building W-40
		09D	Building V-24

Table 2-4 Drinking Water Chemical Sampling Schedule

PWSID 3001500 – NASA Wallops Flight Facility (Main Base)		
Group	**Location(s)**	**Schedule**
MPNs	All active wells	Annually
Nitrate/Nitrite	Building D-4	Annually
HAA5	Building D-10 Building N-162	Annually
TTHM	Building D-10 Building N-162	Annually
Lead and Copper	20 sites	Every 6 months
VOCC	Building D-4	Every 3 years
Metals	Building D-4	Every 3 years
Inorganics	Building D-4	Every 3 years
Radiological	Building D-4	6 years
Cyanide	Building D-4	9 years
SOCs – Carbamates	N/A	Waiver
SOCs - Chlorinated	N/A	Waiver
Acidic Herbicides	N/A	Waiver
SOCs - Diquat	N/A	Waiver
SOCs - Semi-Volatile	N/A	Waiver
Organic Chemical	N/A	Waiver
SOCs - Volatile	N/A	Waiver
Fumigants	N/A	Waiver
	PWSID: 3001535 Mainland/Island	
MPNs	All active wells	Annually
Nitrate/Nitrite	Building U-50	Annually
HAA5	Building U-2	Annually
TTHM	Building V-20	Annually

Lead and Copper	5 sites	Every 3 years
VOCC	Building U-50	Every 3 years
Metals	Building U-50	Every 3 years
Inorganics	Building U-50	Every 3 years
Cyanide	Building U-50	9 years
SOCs – Carbamates	N/A	Waiver
SOCs - Chlorinated	N/A	Waiver
Acidic Herbicides	N/A	Waiver
SOCs - Diquat	N/A	Waiver
SOCs - Semi-volatile	N/A	Waiver
Organic Chemicals	N/A	Waiver
SOCs - Volatile	N/A	Waiver
Fumigants	N/A	Waiver

2.3.4 Reporting

Lab personnel submit reports of analysis to NASA for every accredited drinking water analysis performed. The laboratory prepares the chlorination and orthophosphate reports for each distribution system for NASA, who submit the reports to the VDH Office of Drinking Water by the 10th of the month following the monitoring period.

The laboratory is required, by its accreditation, to report all its drinking water sample data to the VDH directly through its LabAdmin contact group by the 10th of each month. The laboratory is also required to report all results above the applicable EPA PMCL directly to the VDH within 24 hours of discovery. Samples submitted to DCLS for analysis are automatically reported to VDH; if a subcontract laboratory other than DCLS is used for compliance samples, the applicable PWSID number must be provided to the laboratory to ensure results are properly reported to the VDH.

3 Sample Handling and Analysis

3.1 Sample Handling

Samples are delivered to the laboratory in a timely fashion so that analysis begins within the allowable holding time, defined as the time between the end of the sampling event and the start of sample analysis. Samples submitted to the laboratory are well-labeled and accompanied by a completed sample submission form (i.e., chain of custody form).

Samplers must be aware of specific holding times associated with the specific analyses expected to be carried out on their samples; holding times can be found in Appendix A (for non-potable waters) and Appendix B (for potable waters). Strict measures must be taken to avoid contamination and to maintain the integrity of the sample; specific instructions for maintaining sample integrity can be obtained from the laboratory. Samples must be received under proper preservation conditions (both thermal and chemical, as applicable).

The laboratory ships samples to its subcontract laboratories using commercial courier services (i.e., FedEx), selecting delivery options appropriate to sample holding conditions (i.e., overnight delivery for iced samples). Samples are packed into a shipping container appropriate for ensuring sample holding conditions, using ice bags (and bubble wrap, for samples collected in glass containers or those not requiring thermal preservation) with a completed sample submission form for the subcontract laboratory. Shipping containers are securely sealed using packing tape with shipping documentation affixed using an adhesive sleeve. Samples are dropped off to the courier at remote pickup sites (i.e., FedEx Express drop box); if unavailable, samples are transported directly to nearest courier location.

3.2 Analysis

Samples must only be submitted to laboratories accredited to the 2009 TNI (The National Environmental Laboratory Accreditation Conference [NELAC] Institute) Standard under the Virginia Environmental Laboratory Accreditation Program (VELAP). The LJT & Associates, Inc. Analytical Laboratory is a VELAP-certified laboratory (VELAP ID 460031), accredited to perform analyses on potable and non-potable waters using methods promulgated by the Environmental Protection Agency (EPA) under 40 CFR 141 and 40 CFR 136, respectively. The LJT Analytical Laboratory performs its accredited analysis according to its quality system policies and standard operating procedures, written to comply with the requirements of reference methods and those from its accrediting body.

The laboratory reserves the right to subcontract sample analysis to a third-party laboratory certified under the 2009 TNI Standard. Samples are subcontracted if the laboratory lacks accreditation, or otherwise does not have the capability, for the requested analyte.

For parameters not accredited by VELAP (i.e., chlorine, pH), the laboratory still performs analyses according to standard operating procedures complying with the requirements of methods acceptable to the EPA.