

# SITE MANAGEMENT PLAN

# FISCAL YEARS 2020 AND 2021 National Aeronautics and Space Administration Wallops Flight Facility

Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia

> FINAL July 2020

# SITE MANAGEMENT PLAN FISCAL YEARS 2020 and 2021 NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WALLOPS FLIGHT FACILITY WALLOPS ISLAND, VIRGINIA

Submitted to: National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility Code 250.W Building F-160 Wallops Island, Virginia 23337

# Submitted by: Tetra Tech, Inc. 5700 Lake Wright Drive, Suite 309 Norfolk, Virginia 19406

## Under Contract with:

LJT and Associates, Inc. NASA Wallops Flight Facility Building F-16 Room 117 Wallops Island, Virginia 23337

Submitted under: Contract NNG14WA44C Task Order 08-16-2017

# FINAL July 2020

# TABLE OF CONTENTS

<u>SECTI</u>	ON		PAGE		
ACRO	NYM LIS	ST	A-1		
1.0		DUCTION			
1.0	1.1	REPORT ORGANIZATION	I-I 1 2		
	1.1				
2.0	FACILI	ITY BACKGROUND AND CURRENT SITE CONDITIONS			
	2.1	FACILITY DESCRIPTION			
	2.1.1	Facility History			
	2.2	ENVIRONMENTAL INVESTIGATION HISTORY	2-3		
	2.3	CURRENT STATUS OF AOCs	2-7		
2.0	DECU	LATORY PROCESS ACTIVITIES	2.4		
3.0		DESCRIPTION OF CURRENT SITE CONDITIONS	<b>3-</b> 1		
	3.1 3.2	SITE SCREENING PROCESS			
	3.2 3.3	EARLY ACTIONS			
	3.3 3.4	REMEDIAL INVESTIGATIONS			
	3.4	FEASIBILITY STUDIES			
	3.6	PUBLIC COMMENT AND PARTICIPATION	3-4		
	3.6.1	Proposed Remedial Action Plan			
	3.6.2	Record of Decision			
	3.7	REMEDIAL DESIGN/REMEDIAL ACTION			
	3.7.1	Remedial Design			
	3.7.2	Remedial Action			
	3.7.3	Remedial Action Completion			
	3.7.4	Remedial Action Monitoring and O&M Plans			
	3.7.5	Remedial Action Assessment Reports			
	3.7.6	Five-Year Review Reports			
	3.8	CERTIFICATE OF COMPLETION			
4.0	SITE DESCRIPTIONS AND GROUPINGS				
-	4.1	SITE DESCRIPTIONS			
	4.1.1	Maintenance Facility (Site 2)			
	4.1.2	Island Debris Pile (Site 4)			
	4.1.3	Paint Stain (Site 5)			
	4.1.4	Transformer Pads (Site 7)	4-7		
	4.1.5	Transformer Storage Areas (Site 11)			
	4.1.6	Former Wind Tunnel (Site 12)			
	4.1.7	Waste Oil Dump			
	4.1.8	Scrapyard (N-222)			
	4.1.9	Photographic Tank (M-15)			
		Former Fire Training Area (FFTA)			
		Pistol/Rifle Range			
		South End Area (SEDA)			
		Area of Interest – 20 Transformer (AI-20)			
		North Island Transformers			
		Structures F-10-A/F-10B (Paint Locker and Battery Shop)			
		Structure N-166 (Alcohol Storage Building)			
		Former Circular Area (FCA)			
	4.1.18	PFAS Sampling SITE GROUPINGS			
	4.2				
5.0	SCHEE	DULE			
	5.1	SCHEDULE DEVELOPMENT	5-1		

# TABLE OF CONTENTS (Continued)

# SECTION

# PAGE

	5.1.1	Durations Specified in AAOC	
	5.1.2	General Assumptions and Other Durations Used in Developing Project Schedules	5-2
	5.2	SITE SPECIFIC SCHEDULES	5-4
	5.2.1	Maintenance Facility (Site 2)	5-4
	5.2.2	Island Debris Pile (Site 4)	5-4
	5.2.3	Paint Stain and Former Wind Tunnel (Sites 5 and 12)	5-5
	5.2.4	Transformer Pads and Storage Areas (Sites 7 and 11)	5-6
	5.2.5	Waste Oil Dump (WOD)	
	5.2.6	Scrapyard Site (N-222)	
	5.2.7	Photographic Tank Site (M-15)	5-9
	5.2.8	Former Fire Training Area (FFTA)	5-9
	5.2.9	Pistol/Rifle Range (Main Base Firing Range Complex)	. 5-12
	5.2.10	South End Disposal Area (SEDA)	.5-14
	5.2.11	Area of Interest – 20 (AI-20)	
	5.2.12		
	5.2.13		
	5.2.14	Structure N-166 (Alcohol Storage Building)	.5-17
	5.2.15	Former Circular Area (FCA)	. 5-17
	5.2.16	PFAS Sampling	. 5-17
	5.3	SCHEDULE MODIFICATIONS	. 5-19
	5.4	SITE MANAGEMENT PLAN UPDATES AND REPORTING	. 5-19
6.0	PROJE	CT TEAM/COORDINATORS	
••••	6.1	PROJECT COORDINATION	
7.0	FORM	ERLY USED DEFENSE SITES (FUDS)	
	7.1	PROJECT DESCRIPTION AND STATUS	
	7.1.1	Project 03 – Gunboat point, Strafing Target, and EOD Area	
	7.1.2	Project 04 – Machine Gun and Rocket Firing Area	
	7.1.3	Project 05 – Grebe Range and Explosive Ammunition Test Facility	
	7.1.4	Project 06 – Wallops Island NAOTS Cantonment Area	
	7.1.5	Project 07 – Boat Basin and Visitor's Center	
	7.1.6	Project 08 – Boat Basin Area	
	7.1.7	Project 09 – Skeet Range	
	7.1.8	Project 10 – Practice Bombing Target	
	7.1.9	Project 11 – Main Base Areas of Interest	
	7.1.10		
	7.1.11		
		Project 14 – Regulus Launch Area	
	7440	Project 15 – Active Remediation Projects	7-6
		Project 17 – PRP Main Base	

# TABLES

# NUMBER

- 2-1 Areas of Concern NASA Wallops Flight Facility
- 4-1 Summary of Findings Maintenance Facility (Site 2)
- 4-2 Summary of Findings Island Debris Pile (Site 4)
- 4-3 Summary of Findings Paint Stain (Site 5)
- 4-4 Summary of Findings Transformer Pads (Site 7)
- 4-5 Summary of Findings Transformer Storage Areas (Site 11)
- 4-6 Summary of Findings Former Wind Tunnel (Site 12)
- 4-7 Summary of Findings Waste Oil Dump
- 4-8 Summary of Findings Scrapyard (N-222)
- 4-9 Summary of Findings Photographic Tank (M-15)
- 4-10 Summary of Findings Former Fire Training Area
- 4-11 Summary of Findings Pistol/Rifle Range
- 4-12 Summary of Findings South End Disposal Area
- 4-13 Summary of Findings Area of Interest 20 (AI-20)
- 4-14 Summary of Findings North Island Transformers
- 4-15 Summary of Findings Structures F-10A/F-10B
- 4-16 Summary of Findings Structure N-166
- 4-17 Summary of Findings Former Circular Area (FCA)
- 4-18 Summary of Findings Per- and Polyfluoronated Substances (PFAS) Sampling
- 5-1 Schedule of Deliverables/Submittals FY '20-'21 Maintenance Facility Site 2
- 5-2 Schedule of Deliverables/Submittals FY '20-'21 Island Debris Pile, Site 4
- 5-3 Schedule of Deliverables/Submittals FY '20-'21 Paint Stain and Former Wind Tunnel, Sites 5 and 12
- 5-4 Schedule of Deliverables/Submittals FY '20-'21 Transformer Pads and Storage Areas, Sites 7 and 11
- 5-5 Schedule of Deliverables/Submittals FY '20-'21 Waste Oil Dump Site (WOD)
- 5-6 Schedule of Deliverables/Submittals FY '20-'21 Scrapyard Site (N-222)
- 5-7 Schedule of Deliverables/Submittals FY '20-'21 Photographic Tank Site (M-15)
- 5-8 Schedule of Deliverables/Submittals FY '20-'21 Former Fire Training Area (FFTA)
- 5-9 Schedule of Deliverables/Submittals FY '20-'21 Pistol/Rifle Range (Main Base Firing Range Complex)
- 5-10 Schedule of Deliverables/Submittals FY '20-'21 South End Disposal Area
- 5-11 Schedule of Deliverables/Submittals FY '20-'21 Area of Interest 20 (AI-20)
- 5-12 Schedule of Deliverables/Submittals FY '20-'21 North Island Transformers
- 5-13 Schedule of Deliverables/Submittals FY '20-'21 Structures F-10A/F-10B
- 5-14 Schedule of Deliverables/Submittals FY '20-'21 Structure N-166
- 5-15 Schedule of Deliverables/Submittals FY '20-'21 Former Circular Area (FCA)
- 5-16 Schedule of Deliverables/Submittals FY '20-'21 Per- and Polyfluoronated Substances (PFAS) Sampling
- 5-17 Schedule of Annual SMP Updates and Semi-Annual Progress Reports FY '20-'21
- 7-1 Schedule of Deliverables/Submittals FY '20-'21 Project 09- Skeet Range FUDS Program
- 7-2 Schedule of Deliverables/Submittals FY '20-'21 Project 11-Main Base AOI FUDS Program
- 7-3 Schedule of Deliverables/Submittals FY '20-'21 Project 13-Waste Water Treatment Plant
- 7-4 Schedule of Deliverables/Submittals FY '20-'21 Project 15-Site 9 Abandoned Drum Dump
- 7-5 Schedule of Deliverables/Submittals FY '20-'21 Project 15-Site 14 Debris Pile
- 7-6 Schedule of Deliverables/Submittals FY '20-'21 Project 15-Site 15 Debris Pile

# FIGURES

# NUMBER

- 2-1 Facility Location Map
- 2-2 Main Base Location and Water Supply Well Map
- 2-3 Mainland and Wallops Island Location Map
- 2-4 Mainland Water Supply Wells
- 2-5 Main Base Areas of Concern
- 2-6 Mainland and Wallops Island Areas of Concern
- 2-7 Site 7 Main Base Transformer Locations
- 2-8 Site 7 Mainland and Wallops Island Transformer Locations
- 2-9 Site 11 Main Base Transformer Storage Areas
- 2-10 Site 11 Mainland and Wallops Island Transformer Storage Areas
- 2-11 AI-20 and North Island Transformers

# APPENDICES

- A ADMINISTRATIVE RECORD INDEX
- **B** FORMER NAVY SITES FOR REVIEW
- C NASA FORMERLY USED DEFENSE SITE (FUDS) SITES

# **ACRONYM LIST**

AAOC	Administrative Agreement on Consent
ADAS	Advances Data Acquisition Support Facility
AFTF	Aviation Fuel Tank Farm
AOC	Area of Concern
AR	Administrative Record
ASR	Archive Search Report
BMP	Best Management Practices
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLEAN IV	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
COC	Contaminant of Concern
DEQ	Department of Environmental Quality
DOD	Department of Defense
EA	Early action
EE/CA	•
EFANE	Engineering Evaluation/Cost Analysis
	Engineering Field Activities Northeast
EPA	U.S. Environmental Protection Agency
ERP	Environmental Restoration Program
FFTA	Former Fire Training Area
FS	Feasibility Study
FUDS FY	Formerly Used Defense Sites
	Fiscal year
HASP	Health and Safety Plan Long-term monitoring
LTM	5 S
	Land Use Controls
MB	Main Base Munitions and explosition of concern
MEC	Munitions and explosives of concern
ML	Mainland Mamarandum of Agrooment
MOA	Memorandum of Agreement
	National Advisory Committee for Aeronautics
NASA	National Aeronautics and Space Administration
Navy	U.S. Navy
NOAA	National Oceanic and Atmospheric Administration
NTCRA	Non-Time Critical Removal Action
OCR	Oxygen Reducing Compound
O&M	Operations and maintenance
PA	Preliminary Assessment
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PFAS	Per- and Poly-Fluorinated Alkyl Substances
ppm	Parts per million
PRAP	Proposed Remedial Action Plan
RA	Remedial Action
RAC	Remedial action completion
RACR	Remedial Action Completion Report
RAWP	Removal Action Work Plan
RBCs	Risk Based Concentrations
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Managers

SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SEDA	South End Disposal Area
SI	Site Inspection
SMP	Site Management Plan
SSI	Supplemental Site Inspection
SSLS	Soil Screening Levels
SSP	Site Screening Process
SVOCS	Semivolatile organic compounds
TAL	Target analyte list
TCL	Target compound list
TCRA	Time Critical Removal Action
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substance Control Act
THUS	Tetra Tech NUS, Inc.
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UXO	Unexploded ordnance
VOCS	Volatile organic compounds
WFF	Wallops Flight Facility
WI	Wallops Island
WOD	Waste Oil Dump
WWTP	Wastewater Treatment Plant

# CERTIFICATION

The enclosed document was prepared, and is being submitted, in accordance with the requirements of the Administrative Agreement On Consent between the United States Environmental Protection Agency and the National Aeronautics and Space Administration [U.S. EPA Docket Number RCRA-03-2004-0201TH].

I certify that the information contained in or accompanying this document is true, accurate, and complete.

I certify under penalty of law that this document and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature:

Name: Mr. David Liu

Title: NASA Project Coordinator

*K*.

# **1.0 INTRODUCTION**

This updated Site Management Plan (SMP) for the National Aeronautics and Space Administration (NASA) Wallops Flight Facility (WFF) has been prepared by Tetra Tech, Inc. (Tetra Tech) under Task Order 8-03-2019 issued by the LJT and Associates under their prime contract NNG14WA44. The SMP serves as a management tool for planning, reviewing, and setting priorities for environmental investigative, response, and remedial activities to be conducted at NASA WFF under the Administrative Agreement on Consent (AAOC) executed between NASA and U.S. Environmental Protection Agency (EPA) [U.S. EPA Docket Number: RCRA-03-2004-0201TH]. The AAOC was issued under the authority of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments, and by agreement integrates Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), into meeting the obligations of the AAOC. The AAOC applies to past releases of hazardous substances, waste and/or constituents at WFF and identifies CERCLA response requirements, policies, and guidance as the primary process for planning for and performing the work necessary to complete remedial and corrective actions appropriate to those releases. Preparation of this SMP is a requirement of the AAOC. Ultimately, the SMP serves as the schedule for implementation of NASA's environmental investigation and remediation program (i.e., Environmental Restoration Program) at WFF. The SMP is updated annually, in accordance with the AAOC, to revise priorities and schedules of activities, as additional information becomes available. The annual update also serves as the semi-annual progress report for the preceding six-month period.

This updated SMP presents a summary of the facility background and environmental investigations, identifies the Areas of Concern (AOCs) or Sites identified at WFF, provides a review of the current status of each site, and presents the sequence and estimated schedule of future investigation and remediation activities for each site. The SMP presents detailed schedules for the next two Federal Government fiscal years [Fiscal Years 2020 and 2021 (FY 2020 and FY 2021)] and provides, as required by the AAOC, a status report for progress and accomplishments for the six months ending December 1, 2019. Updates to the SMP allow for annual adjustments in scheduled activities for reasons such as Federal budgetary constraints, changes in scope of the investigation/remediation activities, or other unanticipated events.

In addition to providing an update to NASA activities under the Environmental Compliance and Restoration (ECR) Program, this SMP presents planned actions to be accomplished by NASA at Department of Defense (DOD) sites under the Formerly Used Defense Site (FUDS) program. NASA and the Department of the Army signed a Memorandum of Agreement (MOA) on February 26, 2015 authorizing NASA to complete actions on behalf of the DOD at these sites. Section 7 of this report provides more detail regarding the FUDS program.

1-1

# 1.1 REPORT ORGANIZATION

The SMP is organized as follows:

- Section 1.0 consists of this introduction.
- Section 2.0 presents a summary of the facility background and environmental investigations, identifies the AOCs, and discusses the current status of each.
- Section 3.0 provides a description of the investigation/remediation process contained in the AAOC and to be implemented under this SMP.
- Section 4.0 details the current conditions and presents the proposed actions for each of the Sites currently being addressed under this SMP.
- Section 5.0 presents the sequence of activities and target dates for proposed actions at each of the Sites currently being addressed under this SMP, along with a discussion of schedule development.
- Section 6.0 provides the names and responsibilities of Project Team members.
- Section 7.0 provides a summary of the ongoing FUDS program and presents proposed actions and schedules for the active FUDS.

# 2.0 FACILITY BACKGROUND AND CURRENT SITE CONDITIONS

The NASA WFF is located in Accomack County, Virginia and consists of three land parcels; Main Base (MB), Mainland (ML) and Wallops Island (WI). The MB is composed of approximately 2,000 acres and is located near the intersection of Virginia Routes 798 and 175 see Figure 2-1. The ML is located about 6 miles to the south of the MB on Virginia Route 679 and consists of 1,207 acres containing about 100 acres of usable land (the remaining acreage is marshland). The ML parcel is connected to the WI parcel by a causeway constructed in 1960. The WI parcel, a barrier island, is about 7 miles long and consists of about 3,395 acres.

# 2.1 FACILITY DESCRIPTION

The MB is the most heavily developed of the parcels that comprise the NASA WFF. The MB includes NASA administrative and technical offices, tracking and data acquisition components, the range control center, rocket motor storage and processing facilities, research and development facilities, an airfield and control tower, aircraft hangars, and maintenance facilities. The MB also supports tenant organizations including the U.S. Navy (Navy), who maintains a Naval Surface Combat Systems Center, engineering training center, and housing operations; National Oceanic and Atmospheric Administration (NOAA), who maintains satellite antennae and data acquisition operations; and the Mid-Atlantic Regional Space Port (MARS), who maintain an office complex at the MB. The Town of Chincoteague, Virginia is located about 5 miles to the east of the MB.

The MB is bordered to the east by extensive marshland and creeks that drain to the Chincoteague Bay and inlet. Little Mosquito Creek, which eventually also flows east into the inlet and to the Atlantic Ocean, borders the MB to the north and west. State Routes 175 and 798 form the southern and southeastern borders of the facility (see Figure 2-2). The runway complex covers a large portion of the MB and forms a flat plateau-like feature that covers the majority of the highest elevations at MB. Surface water drainage from the MB is through natural and man-made drainage structures. Drainage within the industrialized portions of the MB is controlled and diverted by stormwater collection and conveyance systems. In addition, portions of the base have been isolated from surface water drainage areas by the formation of berms and higher elevation structures. The natural drainage patterns for the southwestern, western, and northern portions of the MB are to Mosquito Creek and its tributaries. The eastern, southeastern, and southern portions of the MB drain to a series of marshlands, creeks, and bays that lead to Chincoteague Bay and the Atlantic Ocean.

In general, groundwater beneath NASA WFF occurs within two water-bearing units or formations, the Columbia and the Yorktown aquifers. The Columbia is an unconfined aquifer that extends to a depth of

about 60 feet below the ground surface. The Columbia is underlain by a 20 to 40 feet thick clay aquitard that isolates the Columbia from the underlying Yorktown aquifer. Groundwater beneath the MB serves as the source of drinking and process water for NASA and tenant organizations as well as the Town of Chincoteague. NASA operates and maintains a permitted water supply system that includes five active wells located across the center portion of the MB, see Figure 2-2. NOAA maintained a single water supply well, drilled into the Yorktown formation, until 2005 when the well was taken out of service and the facility connected to the NASA water supply system. The Town of Chincoteague maintains eight water supply wells located on WFF property along the eastern boundary of the MB. NASA supply wells withdraw water from the Yorktown Aquifer at depths that range from 100 to 260 feet below ground surface. Five of the Town of Chincoteague wells also are completed within the Yorktown Aquifer and withdraw water from depths that range from 96 to 256 feet below ground surface. Three of the Town of Chincoteague wells are completed within the Columbia Aquifer at depths of 40 to 60 feet below ground surface.

The ML is located along the Virginia Inside Passage and borders Hog Creek, which drains the ML. The primary function of the ML is to provide access to WI. A controlled access causeway, extending from the ML over Hog Creek and its marshlands, is the only vehicular access route to the WI parcel, see Figure 2-3. NASA maintains guard houses and limited radar and optical tracking stations on the ML. The ML also provides all drinking and process water for WI. NASA operates and maintains two drinking water supply wells on the ML, see Figure 2-4. The drinking water wells withdraw water from the Yorktown aquifer at depths of 195 to 255 feet below the ground surface. In September 2006, NASA abandoned two former fire protection water supply wells (U51 and U52) located on the ML.

WI is located immediately east of the ML and is accessed by the causeway leading from the ML. NASA maintains launch, launch support and research, and tracking facilities on WI. NASA also maintains emergency services on the island. The Navy, as a tenant, operates and maintains training, research and development, and launch facilities on WI. Mid-Atlantic Regional Space Port operates two launch facilities located on WI. The primary drainage from the island is to the west to Hog Creek and its tributaries which flow to Bogues Bay, and finally to the Atlantic Ocean. Drainage from the eastern coastline portion of the island is directly to the Atlantic Ocean. There are no groundwater supply wells located on WI.

# 2.1.1 Facility History

NASA, and its predecessor organization National Advisory Committee for Aeronautics (NACA), have had a presence at WFF since 1945. The NACA established a presence on the southern portion of Wallops Island in 1945 and launched its first rocket in that year. In 1946 the NACA constructed launch and radar

2-2

support and experimental facilities. Access to the island at that time was by water vessel only. Operations by NACA at WFF were limited to these test facilities until 1959 (Occu-Health, 1999).

NASA was officially created by the U. S. government in 1958. At that time the NACA was absorbed into NASA. In 1959, NASA expanded its presence at WFF with the lease of the MB from the U.S. Navy on June 30, 1959 and the acquisition of the ML parcel. NASA formally acquired the MB from the U.S. Navy on December 1, 1961. The Navy operated the Chincoteague Naval Auxiliary Air Station at the MB from 1942 until 1959 when NASA acquired the facility. The Navy took control of the MB property in 1942 and in 1943 constructed runways, buildings, and other support facilities for naval aviation and aviation ordnance testing and training. The Navy conducted pilot training and aviation and ordnance testing at the facility until the base was closed in 1959 [(Occu-Health, 1999) and (USACE, 2000)].

NASA continues to maintain the runways constructed at the facility by the Navy and occupies many of the structures and buildings that were present at the time of the property transfer. In addition, NASA has expanded and constructed additional buildings within the WFF area to support their mission and to provide support to other tenant organizations. NASA constructed the causeway that connects the ML to the WI parcel in 1960. The mission of NASA's WFF has undergone several changes since it was established in 1959, but the main focus has been and continues to be rocket research, the management of suborbital projects, suborbital and orbital tracking, aeronautical research, and space technology research. NASA does not manufacture rockets or rocket fuels/propellants at WFF. Rocket motors are transported to the facility from other facilities.

# 2.2 ENVIRONMENTAL INVESTIGATION HISTORY

Formal environmental investigations on a facility-wide basis began in 1988 with the initiation of an environmental site survey and Preliminary Assessment (PA) and continue today as an active program with EPA and Virginia Department of Environmental Quality (DEQ) providing oversight. Under this program, NASA has established an Administrative Record (AR) for the facility that contains CERCLA and environmental restoration program related documents. A copy of the AR index of documents is presented in Appendix A. Note that the AR index was last updated in March 2017. NASA is currently preparing a web-based, searchable, AR that will include the updated AR Index; the web-based, AR will be available in 2020; the AR will include documents prepared for FUDS by others as well as those prepared by NASA. If the web-based AR system is not available in the next six months, an updated AR index will be provided with the semi-annual SMP update. NASA continues to maintain and update the AR as documents are generated. A copy of the updated AR index will be included in the annual update of this SMP (see Section 5.4).

A series of facility-wide surveys, assessments, and inspections were performed by NASA between 1988 and 1996. The purpose of these investigations was to assess the site conditions and identify AOCs that may pose a potential threat to human health or the environment through a release of hazardous materials or substances. The primary documents that were prepared as a result of these investigations included a PA (NASA, 1988) and a series of Site Inspections (SIs) that included records reviews, site surveys, soil gas analysis, geophysical investigations, monitoring well installation and media sampling and analysis (Ebasco, 1990; Metcalf & Eddy, 1992; Metcalf & Eddy, 1996).

In addition to NASA environmental programs at WFF, the U.S. Army Corps of Engineers (USACE) has an active environmental program at WFF. As indicated in Section 2.1.1, NASA acquired the property from the Navy in 1959. Prior to NASA operations, the Navy operated an aviation training facility at the MB for approximately 17 years. Some of the AOCs identified in the initial surveys were identified as being associated with activities that solely took place prior to NASA presence. Because of this finding, the USACE, in consultation with NASA and EPA, conducted a series of assessments and investigations to determine responsibility and eligibility for these AOCs under the FUDS program. A FUDS is property that was under the jurisdiction, owned, leased, or otherwise possessed by the DOD at the time of actions leading to contamination by hazardous substances. The FUDS program is limited to those real properties that were transferred from DOD control prior to October 17, 1986. The DOD delegated the responsibility to carry out the FUDS Program to the United States Army Corps in the Defense Environmental Restoration Program Act (DERP). The primary USACE documents that presented the findings of these assessments include a Site Characterization Report, Site Investigation Report, and Desk Top Audit and Site Screening Process Report (USACE, 1999; USACE, 2003; USACE, 2003a). In addition to these reports, the USACE and the EPA each completed aerial photographic analysis of the facility. The purpose of the analysis was to review historical and current aerial photographic images along with facility environmental documents to evaluate the characteristics of known AOCs and to identify other potential AOCs (USACE, 2000; EPA, 1996; EPA, 2004). The Baltimore Corps of Engineers developed a Site Management Plan for the NASA Wallops Flight Facility FUDS sites referenced in this document.

Twenty-four AOCs were identified as a result of these assessments. NASA, in consultation with the EPA, DEQ, and USACE, prioritized activities at these AOCs and since 1992 actions have been pursued on individual tracks based on the priority and potential hazard identified at each AOC.

In addition to the above facility-wide assessments, NASA funded the USACE (St. Louis District) to conduct an Archive Search Report (ASR) for the facility. The purpose of the ASR is to identify areas of possible concern resulting from past Navy operations from 1942 through 1959 and to evaluate the possible presence of munitions and explosive of concern (MEC) at WFF. The ASR includes a review of historical records available through the DOD, a review of historical aerial photographs, interviews with

former DOD employees, and a series of site reconnaissance. The ASR was initiated in March 2005 and the final ASR was submitted to EPA and DEQ for review on October 20, 2005 (USACE, 2005). The results of the assessment were reviewed by the Project Team (see Section 6.0) and in the second quarter of FY 2007 it was agreed that a number of potential areas should be referred to the USACE for consideration under the FUDS program and no new NASA AOCs were identified. However, based on some uncertainty regarding the final close-out of several petroleum and/or polychlorinated biphenyl (PCB) related components, NASA proposed to conduct focused investigations and sampling studies at six former storage/operational areas. NASA completed the investigations in late FY 2007. Samples were collected from four of the areas to assess the presence or absence of an evidence of release. Samples were not collected from the other two areas because historical information did not indicate the use of potentially hazardous substances at either and the exact locations of the operations could not be field verified. The analytical results and investigation findings were presented to the Project Team for discussion in June 2008. Based on a review of the findings a No Further Action Decision was agreed to for four of the sites and a No Further Action Decision Document was finalized in March 2009 and signed on June 18, 2009 (NASA, 2009). The other two sites, including potential sub areas of concern identified during the investigation, were referred to the USACE for investigation under the FUDS program.

In FY 2006, to further supplement the facility-wide assessments discussed above, NASA initiated a second ASR focusing on operations post-1959 activities. The supplemental, or Phase II ASR, was also conducted by the USACE St. Louis District and evaluated operations conducted at WFF during the early years of NASA operations as well as operations conducted by other Federal Agencies under existing tenant agreements. The ASR records and field investigation was conducted in FY 2007 and FY 2008. A draft report presenting the findings of the review was released during the second quarter of FY 2009. However, because the USACE also was conducting a facility-wide assessment the report was not finalized under the NASA agreement. The draft report was submitted to the USACE, EPA and DEQ for review to support the ongoing USACE investigation and to be used to support reaching a consensus on the identification of any additional potential AOCs. Based on the review it was determined that no new NASA AOCs were identified. However, the report did identify a number of potential FUDS program areas of concern that were referred to the USACE.

One additional AOC, referred to as the South End Disposal Area (SEDA), was identified by NASA as part of the ongoing environmental management program. The site was discovered in late 2009 after a series of severe storms caused significant erosion of the beach along the southern end of Wallops Island. The erosion exposed several military grade munitions. NASA secured the area and an Air Force Explosive Ordnance Disposal (EOD) unit from Dover Air Force Base responded and treated the munitions on site. The EOD unit identified the munitions as 3.5-inch M28 and M29 Rockets. Because of their unknown source and the possible presence of additional munitions, NASA maintained temporary fencing along the

2-5

southern end of the island and restricted access to the area of concern. In addition, NASA-trained security personnel conducted visual inspections of the area after subsequent storms. Additional munitions and explosives of concern (MEC), including what appeared to be possible NASA originated rocket motors, were identified after several severe 2009-2010 winter storms. The material was also treated by the Air Force EOD Unit from Dover, Delaware.

During FY 2010, NASA initiated an assessment of historical records and aerial photographs of the area of concern to determine its past use and to identify possible sources of the MEC. As a result of the initial findings, NASA concluded that development of the southern end of Wallops Island and possible placement of MEC at the SEDA likely occurred during NASA ownership/management of Wallops Island. The initial site discovery and the results of the historical records review were reported to EPA and DEQ, and the SEDA was identified as an additional AOC to be tracked under the AAOC and this SMP.

Two additional AOCs related to transformers left in place when the Navy ceased operations on Wallops Island were added during FY 2014. These AOCs were identified as Areas of Interest (AI) under the FUDS Program. The two AOCs have been referred to as the AI-20 Transformer and the North Island Transformers. The AI-20 Transformer Site was initially investigated by USACE and found to consist of a pole-mounted transformer. Sampling and analysis of soils at the base of the pole revealed high levels of PCB, indicating that the transformer had likely leaked fluid. The North Island Transformer Site consists of 17 other poles that were part of the electrical system used during Navy operations on the north end of Wallops Island. The poles were identified on a historical facility map. Follow-up investigations of AI-20 or the North Island Transformers were not conducted by the USACE. In FY2014, NASA decided to assume responsibility for further investigation and actions for both AOCs.

In FY 2014, NASA reached agreement with the USACE that NASA would take responsibility for further assessment, and investigation if warranted, of sixty-three (63) structures (buildings, tanks, substructures, pipe stands, etc.) identified as potential sites under the FUDS program (see Appendix B *Former Navy Sites For Review*). NASA, in conjunction with EPA and DEQ, initiated the screening assessment of these potential sites in late FY 2014. The initial screening of these potential sites was completed in FY 2015 and in FY 2016 EPA, DEQ, and NASA reached a consensus that, with the exception of three structures, the areas of concern were not sites. A Concurrence Statement documenting No Further Action or assessment for 60 of the sites and requiring further assessment for structures F-10A/F-10B (Paint Locker and Battery Shop), and N-166 (Alcohol Storage Building) was signed December 8, 2015 (Tetra Tech, 2015L).

In FY 2016, NASA agreed to conduct further investigations of an area referred to as the Former Circular Area (FCA) located in the wetland/marsh area on the east side of the facility. A Site Investigation is currently being conducted at the FCA, but it is not considered an AOC.

In FY 2015, NASA and DOD, through the Department of the Army, negotiated and signed a MOA delegating CERCLA response action authority for the FUDS program at NASA WFF to NASA (NASA, 2015). The MOA lists the FUDS identified at that time and establishes a process for evaluating and identifying additional sites as appropriate. The full listing of the FUDS identified in the MOA is presented in Appendix C and addressed in Section 7.

In FY 2017 and 2018, NASA initiated a per- and polyfluorinated alkyl substances (PFAS) sampling program, including the WFF, Town of Chincoteague, and Trails End Utility Commission drinking water systems, newly-installed perimeter wells, temporary on-site wells, and existing site monitoring wells. This PFAS program is not being conducted under a specific AOC. In FY 2019, NASA conducted a PFAS Site Investigation, including sampling of groundwater, soil, surface water, sediment, and wastewater.

# 2.3 CURRENT STATUS OF AOCs

As indicated above, 29 AOCs have been identified at the NASA WFF as a result of a series of assessments conducted under the oversight of EPA and DEQ. NASA has coordinated activities at these 29 AOCs with EPA and DEQ and has taken actions to address potential risks, on a priority basis, under the appropriate environmental and regulatory programs. Actions conducted at the AOCs include supplemental investigations, sampling programs, removals, product recovery, remedial investigations (RIs), feasibility studies (FSs), remediation, and closeout. The current status of the AOCs is summarized in Table 2-1. Each AOC, in addition to the FCA and PFAS sampling, is discussed individually below.

# Old Navy Wastewater Treatment Plant (WWTP)

The Old Navy WWTP was constructed by the Navy in the early 1940s. The plant is located on the MB to the northwest of the intersection of Runway 17-35 and the taxiway that parallels Runway 10-28, see Figure 2-5. NASA never used the facility for any purpose. NASA, EPA, DEQ, and the USACE have reviewed records for the Site and have concluded that the Old Navy WWTP should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). This site is addressed in the Baltimore Corps of Engineers Site Management Plan for Wallops Flight Facility FUDS sites. Further action is being implemented by NASA under the MOA between the Department of the Army and NASA. See Section 7 for activities conducted under the FUDS MOA.

FY-'20-'21 SMP

#### Maintenance Facility (Site 2)

The Maintenance Facility (Building E-52 or Site 2) is located in the central portion of the MB, see Figure 2-5. The Site consists of the former location of a motor pool and maintenance shop operated by the Navy and later operated by NASA as a landscaping and grounds maintenance shop. Building E-52 was demolished in 1994 and a portion of the area is currently an asphalt parking lot. A series of PAs and SIs were conducted at the Site from 1988 through 1993 (Metaclf & Eddy, 1996). These investigations identified the presence of residual contamination in soils. NASA conducted a Supplemental Site Investigation (SI) of the Site in FY 2005 and the Final Supplemental SI Report was issued in FY 2006. NASA, EPA, and DEQ have reviewed the site documents and analytical results from site samples, and have concluded that No Further Action is required for Site 2. This decision was documented in a Concurrence Statement signed by EPA, DEQ, and NASA in 2006 and issued with the Final Supplemental SI Report (TtNUS, 2006). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

#### Two 600,000-Gallon Fuel Tanks (A46-A and A46-B)

Buildings A46-A and A46-B consists of two underground 600,000-gallon fuel storage tanks and associated piping and control structures. The facility is located in the northeast corner of the MB, see Figure 2-5. The Navy constructed the two underground storage tanks and used them for the storage of JP-4 fuel. The tanks were reportedly decommissioned by removing the product and filling the void with sea water. NASA has not used the tanks or associated facilities since their operations commenced in 1959. NASA, EPA, DEQ, and the USACE have reviewed records for the facility and have concluded that it should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). Site characterization and investigations were conducted under the DEQ Petroleum Program and in accordance with Virginia's Underground Storage Tank regulations. The USACE Baltimore District has attained closure with the DEQ through the Tidewater Regional Office (see Section 7.1.9). The USACE is preparing a Consensus Statement documenting the deferral/closure under the FUDS Program for regulator signature. No NASA action under the FUDS Program is planned at this time.

#### Island Debris Pile (Site 4)

Site 4 is located in a remote area of WI and consists of a former debris pile/open dump containing debris, rubble, and general refuse, see Figure 2-6. Soil samples collected at the site as part of a SI detected the presence of residual contamination in the soils (Metcalf & Eddy, 1996). A series of studies and debris characterization, removal and disposal were conducted through 2007. NASA conducted a SI of the Site in FY 2008 and the Final SI Report was approved in FY 2009 (TtNUS, 2009). Based on the findings of the

FY-'20-'21 SMP

SI, EPA and DEQ agreed that NASA could pursue a Non-Time Critical Removal Action (NTCRA) to address residual soil contamination at the Site. An Engineering Evaluation/Cost Analysis (EE/CA) and Action Memorandum (AM) were prepared, finalized and published to support the removal action (TtNUS, 2010a and TtNUS, 2010b). The NTCRA was conducted in FY 2011 and a final Construction Completion Report summarizing the removal action and presenting current site risks/conditions was finalized in December 2011 (Tetra Tech, 2011). The final completion report was approved and EPA, DEQ and NASA issued a No Further Action Consensus Statement in February 2012. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

### Paint Stain (Site 5)

Site 5 consists of soil contamination associated with the operation of a paint shop and spray booth located on WI, see Figure 2-6. The Site is collocated with the Former Wind Tunnel (Site 12). A series of assessments and inspections conducted at the site through 1993 identified soil contamination in excess of human health screening concentrations (Metcalf & Eddy, 1996). Initial remedial investigations were performed in 1997 and 1998 to further define the nature and extent of the contamination and a removal action was completed at the site in 2003 (Versar, 2001; FWEC, 2003). Supplemental RI activities were conducted from FY 2005 through FY 2008 (Weiss and Associates, 2008). A Feasibility Study (FS) addressing remedial alternatives for residual contamination at the Site was finalized and approved in September 2009 (TtNUS, 2009a). A Proposed Remedial Action Plan (PRAP), presenting the preferred remedial alternative was issued in March 2010 (TtNUS, 2010d). A Record of Decision (ROD) was prepared and underwent a series of reviews and revisions from March 2010 to October 2011. The final ROD was signed by NASA on October 28, 2011, concurred on by DEQ in November 2011, and approved by EPA in December 2011 (NASA, 2011a). Remedial Action Work Plans were prepared in 2012 and the RA consisting of excavations, offsite disposal and site restoration were completed from April 2013 to June 2013. The final Remedial Action Completion Report (RACR) was issued in June 2014 (Tetra Tech, 2014). The EPA approved the RACR and issued a Certificate of Completion for Sites 5 and 12 in June 2014 (EPA, 2014a). Sections 4.0 and 5.0 of this report provide more details regarding this Site and planned activities.

#### Former Island Fueling Station (Site 6)

Site 6 is the former location of a service station and associated petroleum storage tanks located in the central portion of WI, see Figure 2-6. The area was identified as an AOC as part of the PA/SI process (Metcalf & Eddy, 1996). All storage tanks, pumps and associated piping have been removed from the Site. NASA initiated actions at the Site under the Petroleum and Underground Storage Tank (UST) Program administered by DEQ in 1992. NASA, EPA, and DEQ have reviewed records for the site and

2-9

have concluded that the site is exempt from CERCLA and has deferred all actions to the UST program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004a).

# Transformer Pads (Site 7)

Site 7 consists of former electrical transformer locations. These locations were identified as an AOC due to the presence of staining or reports of possible leakage of dielectric fluids containing PCBs (Metcalf & Eddy, 1996). A total of 27 former transformer locations on the MB, ML, and WI were identified, see Figures 2-7 and 2-8. NASA removed all of the transformers and disposed of them off-site in accordance with applicable regulations. A series of transformer inventories, replacement programs, and sampling and remediation programs to address these locations was implemented by NASA from 1985 through 2004. A report presenting the actions taken and the current status of each location was prepared and submitted to EPA and DEQ in September 2004 (TtNUS, 2004b). A review of available data indicated that one location, Building X-115, contains PCB concentrations above applicable regulatory levels. Building X-115 is located within the Site 5 and 12 area. NASA, EPA, and DEQ agreed that this location will be addressed concurrent with actions taken at those sites. NASA, EPA, and DEQ have reviewed the site documents and analytical results from site samples for the remainder of the Site 7 locations, and have concluded that No Further Action is required at these locations. This decision was documented in a Decision Document signed by EPA, DEQ, and NASA in 2005 (TtNUS, 2005). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Former Main Base Fueling System (Site 8)

The Former Main Base Fueling System is located near the main gate of WFF on the MB and consists of the former location of a gasoline station, see Figure 2-5. The facility was identified as an AOC during the PA/SI process due to the presence of soil staining (Metcalf & Eddy, 1996). NASA initiated tank closure activities at the facility in 1990 under the UST program administered by DEQ. DEQ officially concurred with the closure of the Site in 1998 (NASA, 2004a). NASA conducted additional sampling at the facility in 2000 to confirm the closure and DEQ concurred with the findings. NASA, EPA, and DEQ have reviewed records for the Site and have concluded that the Site is exempt from CERCLA and have deferred all actions to the UST program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004a).

FY-'20-'21 SMP

#### Abandoned Drum Dump (Site 9)

Site 9 was discovered during a NASA walk-through survey of facility stormwater discharges and was designated as an AOC. The Site consists of abandoned drums located within the tree line along Runway 17-35, see Figure 2-5. The abandoned drum field is approximately 600 feet long and ranges from 20 to 200 feet in width. A review of historical photographs revealed that the drum field was present prior to NASA's operations commencing in 1959. Since the property transfer, NASA has not utilized the area for any purpose. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that Site 9 should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). This site is addressed in the Baltimore Corps of Engineers Site Management Plan for Wallops Flight Facility FUDS sites. Further action will be implemented by NASA under the MOA between the Department of the Army and NASA. See Section 7 for activities conducted under the FUDS MOA.

# Advanced Data Acquisition Support Facility (ADAS)

The ADAS Site is located in the southern portion of the Main Base area and consists of a dish antenna, its support structures, and the surrounding soils and groundwater, see Figure 2-5. The Site was identified as an AOC due to soil staining, the presence of drum storage areas, and anecdotal information regarding the possible previous spillage of hydraulic and cleaning fluids. A series of sampling investigations were conducted at the ADAS Site from 1993 through 2003 (Metaclf & Eddy, 1996; Versar, 2001a; TtNUS, 2003). NASA, EPA, and DEQ have reviewed the site documents and analytical results from site samples and have concluded that No Further Action is required at the ADAS Site. This decision was documented in a Decision Document signed by EPA, DEQ, and NASA in 2003 (TtNUS, 2003).

#### Transformer Storage Areas (Site 11)

Site 11 consists of three buildings where Site 7 transformers removed from service were temporarily stored before being sent off site for disposal. Two of the buildings are located on the MB and one on WI, see Figures 2-9 and 2-10. These locations were identified as an AOC during the PA/SI process due to the potential for a release (Metcalf & Eddy, 1996). All of the transformers have been removed from the buildings and disposed of off-site in accordance with applicable regulations. The buildings are currently used for other purposes (TtNUS, 2004b). NASA has conducted a series of investigations at the AOC. Generated data indicates that PCB levels are below acceptable regulatory criteria. A report presenting the actions taken and the current status of each location was prepared and submitted to EPA and DEQ in September 2004 (TtNUS, 2004b). NASA, EPA, and DEQ have reviewed the site documents and analytical results from site samples and have concluded that No Further Action is required at Site 11.

This decision was documented in a Decision Document signed by EPA, DEQ, and NASA in 2005 (TtNUS, 2005). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Former Wind Tunnel (Site 12)

Site 12 consists of contamination associated with the operation of a former engine testing facility located on WI, see Figure 2-6. The Site is collocated with Site 5. A series of assessments and inspections conducted at the site through 1993 identified soil contamination in excess of human health screening concentrations (Metcalf & Eddy, 1996). Initial remedial investigations were performed in 1997 and 1998 to further define the nature and extent of the contamination and a removal action was completed at the site in 2003 (Versar, 2001; FWEC, 2003). Supplemental RI activities were conducted from FY 2005 through FY 2008 (Weiss and Associates, 2008). A Feasibility Study (FS) addressing remedial alternatives for residual contamination at the Site was finalized and approved in September 2009 (TtNUS, 2009a). A Proposed Remedial Action Plan (PRAP), presenting the preferred remedial alternative was issued in March 2010 (TtNUS, 2010d). A Record of Decision (ROD) was prepared and underwent a series of reviews and revisions from March 2010 to October 2011. The final ROD was signed by NASA on October 28, 2011, concurred on by DEQ in November 2011, and approved by EPA in December 2011 (NASA, 2011). Remedial Action Work Plans were prepared in 2012 and the RA consisting of excavations, offsite disposal and site restoration were completed from April 2013 to June 2013. The final Remedial Action Completion Report (RACR) was issued in June 2014 (Tetra Tech, 2014). The EPA approved the RACR and issued a Certificate of Completion for Sites 5 and 12 in June 2014 (EPA, 2014a). Sections 4.0 and 5.0 of this report provide more details regarding this Site and planned activities.

# Ordnance Disposal Area (Boat Basin)

The Ordnance Disposal Area consists of the boat basin and surrounding land features that were used by the Navy as a transfer and reportedly disposal location for ordnance, see Figure 2-5. The boat basin was constructed and used by the Navy prior to NASA operations commencing in 1959. Since acquiring the facility, NASA has not used the boat basin for any ordnance disposal activity, has never used the type of ordnance identified at the Site, and has only used the area for docking purposes. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that the boat basin should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). This site is addressed in the Baltimore Corps of Engineers Site Management Plan for Wallops Flight Facility FUDS sites. Further action will be implemented by NASA under the MOA between the Department of the Army and NASA. See Section 7 for activities conducted under the FUDS MOA.

FY-'20-'21 SMP

#### Debris Pile (Site 14)

Site 14 consists of debris piles located on the MB along the taxiway north of Runway 10-28, see Figure 2-5. Historical photographs dating prior to NASA's operations commencing in 1959 indicate the presence of the debris piles. Since the property transfer, NASA has not used the area for any purpose. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that Site 14 should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). Further action is being implemented by NASA under the MOA between the Department of the Army and NASA. See Section 7 for activities conducted under the FUDS MOA.

# Debris Pile (Site 15)

Site 15 consists of debris piles located near the north end of Runway 17-35, see Figure 2-5. Historical photographs dating prior to NASA's operations commencing in 1959 indicate the presence of the debris piles. Since the property transfer, NASA has not used the area for any purpose. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that Site 15 should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). Further action is being implemented by NASA under the MOA between the Department of the Army and NASA. See Section 7 for activities conducted under the FUDS MOA.

#### Waste Oil Dump (WOD)

The WOD is located on the MB beyond the end of Runway 17-35, see Figure 2-5. The AOC was reportedly used by the Navy and NASA for the disposal of waste oils and other flammable liquids (possibly solvents). Petroleum contaminated soils were excavated and removed from the Site by NASA in 1986. A records review and sampling conducted as part of the PA/SI process identified the area as an AOC due to the presence of contamination in soils and groundwater (Metcalf & Eddy, 1992). An RI conducted at the WOD in 2001 confirmed the presence of contamination at the Site (Versar, 2001b). NASA conducted a Supplemental RI at the Site in 2003 and issued a final RI Report in 2004 (TtNUS 2004d). Based on the findings presented in the Supplemental RI, NASA prepared a FS evaluating remedial options for the Site in 2005 (TtNUS, 2005b). The selection of an RA was proposed and finalized from 2007 through 2008 (TtNUS 2007). The final ROD was concurred on by DEQ in March 2008 and signed by EPA and issued in April 2008 (TtNUS, 2008a). RAs were planned and implemented from 2008 through 2009. A Remedial Action Completion Report (RACR) was prepared in 2010 and finalized and issued in 2011 (TtNUS, 2011a). In addition, a Long-Term Monitoring Plan for the WOD Site

was prepared issued and approved in October 2009 (TtNUS, 2009c). Quarterly LTM sampling events were conducted in March, June, September, and December 2010 (LTM Rounds 1, 2, 3, and 4 respectively). Quarterly sampling reports were prepared and submitted and an annual report, evaluating the results of the calendar year (CY) 2010 results, was prepared and submitted in March 2011 and finalized in November 2011 (TtNUS, 2011d). CY 2011 sampling rounds were conducted in March and September 2011 and the final CY 2011 Annual Report was issued in August 2012 and approved in September 2012 (Tetra Tech, 2012a). Recommendations from the CY'10 and CY'11 Annual Reports were incorporated into the Long-Term Monitoring Plan and Revision 1 of the Plan was finalized in August 2012 and approved by DEQ and EPA in September 2012 (Tetra Tech, 2012b). CY 2012 sampling rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra Tech, 2012c). The CY'12 Annual Report, presenting the results of the September sampling and evaluating the calendar year results was issued in December 2012 and finalized in May 2013 (Tetra Tech, 2013). CY 2013 sampling rounds were conducted in March and September 2013. A data report presenting the results from the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013a). The CY'13 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2013 and finalized in February 2014 (Tetra Tech, 2014a). CY 2014 sampling rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was issued in July 2014 (Tetra Tech, 2014b). The CY'14 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2014 and finalized in April 2015 (Tetra Tech, 2015). The spring 2015 semi-annual sampling event was conducted in March 2015 and the data report issued May 2015 (Tetra Tech, 2015a). The CY'15 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2015 and finalized in April 2016 (Tetra Tech, 2016). The semi-annual sampling continued in April and October 2016; the report was finalized and issued in February 2017 (Tetra Tech, 2017), with the recommendation to reduce the sampling frequency to twice every five years with one sampling event in the spring and one in the fall. The next round of sampling was conducted in October 2017. The report was issued as a draft on February 1, 2018; the EPA and DEQ comments were received on February 22 and 28, 2018, respectively. The final report was issued on March 13, 2018 (NASA, 2018c). The next round of sampling is planned in March 2020.

The 2013 five-year review process was initiated in December 2012. Data review, site inspections, interviews and remedy evaluations were conducted through June 2013 when the draft Five-Year Review Report was issued for regulator review and comment. Regulator comments were received in November 2013 and resolved on January 8, 2014. The document was finalized in January and issued in February 2014 (Tetra Tech, 2014g). The review concluded that the WOD remedy was protective and made no

recommendations for further evaluation. EPA issued a letter dated March 6, 2014 concurring with the findings (EPA, 2014).

The draft of the 2018 Five-Year Review for this site was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019, with EPA concurrence on March 7 (NASA, 2019a). The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

## Old Aviation Fuel Tank Farm (AFTF)

The AFTF, located near the center of the MB and adjacent to the active runway, consisted of a fuel tank farm for the storage and distribution of fuels for airplanes and vehicles, see Figure 2-5. The facility was constructed and operated by the Navy and later used by NASA until 1982 when a new aviation fuel depot was constructed. Releases from the Site were identified in 1988 as part of the PA/SI process. Further sampling and analysis conducted at the site identified petroleum-related contamination present in soils and groundwater (Metcalf & Eddy, 1992). In 1991, all of the tanks, pumps, buildings, and 4,700 tons of petroleum-contaminated soil were removed from the AFTF Site. In addition, NASA reported the findings to the regulators and initiated actions under the Federal and State petroleum and UST programs. Actions have included the completion of site characterization studies and the design and implementation of Corrective Action Plans (CAPs). NASA is currently operating remediation systems and performing routine monitoring and reporting at the AFTF under the State UST programs. NASA, EPA, and DEQ have reviewed records for the Site and have concluded that the Site is exempt from CERCLA and have deferred all actions to the UST program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004a).

# Scrapyard (N-222)

The Scrapyard is located near the main gate to the MB adjacent to Building N-222, see Figure 2-5. The Scrapyard was identified as an AOC during the PA/SI process. Sampling conducted at the Scrapyard in 1990 identified PCB and mercury contamination in soils (Metcalf & Eddy, 1992). Additional investigations at the Scrapyard have included a Limited RI, radiological surveys, further site characterization, and removal actions (Metcalf & Eddy, 1995; Weiss and Associates, 2003; FWEC, 2004a). Groundwater investigations for the Scrapyard Site were completed in 2005 and a final groundwater characterization report was issued in December 2005 (Weiss and Associates 2005a). In 2006, NASA conducted a detailed review and evaluation of past activities and analytical results for the Scrapyard Site and issued a Site Status Summary Report (TtNUS, 2006a). NASA, EPA, and DEQ reviewed the site documents and analytical results from site samples and concluded that No Further

2-15

Action is required at the Scrapyard Site. This decision was presented in PRAP published in February 2007 (TtNUS, 2007a). The draft ROD documenting the decision was submitted in May 2007. Several rounds of comments on the ROD were received from June through November 2007. Comments were resolved in January and the final ROD was signed by NASA and EPA, and concurred on by DEQ, and issued in February 2008 (TtNUS, 2008b). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

## PCB Transformer Pad (N-161C)

The N-161C Transformer Pad, located in the southern portion of the MB, was identified as an AOC during the PA/SI process because of visible staining under and around the transformer, see Figure 2-5. NASA replaced the transformer in 1990 and initiated a soil sampling and excavation program that resulted in the removal of PCB contaminated soils to regulatory requirements (TtNUS, 2003a). NASA, EPA, and DEQ have reviewed the site documents and analytical results from site samples and have concluded that No Further Action is required at the N-161C Transformer Site. This decision was documented in a Decision Document signed by EPA, DEQ, and NASA in 2003 (TtNUS, 2003a).

## Photographic Tank (M-15)

The Photographic Tank is located behind Building M-15 on the north side of the MB, see Figure 2-5. The Photographic Tank is a wastewater processing tank that received wash and rinse waters associated with a photographic developing laboratory. The AOC was initially sampled in 1990 under a facility-wide SI (Ebasco, 1990). The analytical results indicated a possible release due to overflows that occurred from the tank. Subsequent sampling and investigations characterized the nature of the contamination at M-15 and concluded that surface soils associated with the Site contained metals contamination that may present a risk to the environment (TtNUS, 2003b; TtNUS, 2004e). Additional investigations and assessments were conducted in 2005 and 2006 and a final Ecological Risk Assessment (ERA) was issued in February 2007 (TtNUS, 2007b). Based on the site findings and contaminant concentrations, EPA, DEQ and NASA concluded that No Action was required at the M-15 Photographic Tank Site and a Decision Document closing the Site was issued in February 2007 (TtNUS, 2007b). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Former Fire Training Area (FFTA)

The FFTA is located along Runway 10-28 in the northern portion of the MB, see Figure 2-5. The Site was used by the Navy and NASA for fire fighter training exercises. It is reported that flammable liquids were dispersed onto the ground, into a pit, onto an abandoned plane fuselage, and/or into a tank and ignited

for these exercises. Petroleum contaminated soils were excavated and removed from the Site by NASA in 1986. The area was identified as an AOC because of the site use history as well as visible staining. A series of site inspections were conducted at the Site and the data indicated a release had occurred at the FFTA (Metcalf & Eddy, 1992). An RI conducted at the FFTA in 1996 confirmed the presence of contamination at the Site (Metcalf & Eddy, 1996a). NASA conducted additional sampling and analysis at the FFTA in 2000 and 2003 and a Supplemental RI Report was issued in 2004 (TtNUS, 2004c). Based on the findings presented in the Supplemental RI, NASA prepared a FS evaluating remedial options for the Site. The final FS was submitted August 31, 2005 (TtNUS, 2005c). Selection of an RA was proposed in a final PRAP published in February 2007 (TtNUS, 2007c). Selection of the final remedy presented in the ROD was concurred on by DEQ, signed by NASA and EPA, and issued in December 2007 (TtNUS, 2007f). RAs were implemented from 2008 into 2010. A RACR was prepared in 2011 and is undergoing regulator review. In addition, a Long-Term Monitoring Plan for the FFTA Site was prepared issued and approved in August 2010 (TtNUS, 2010j). Quarterly LTM sampling events were conducted in March, June, September, and December 2010 (LTM Rounds 1, 2, 3, and 4 respectively). Quarterly sampling reports were prepared and submitted and an annual report, evaluating the results of the calendar year (CY) 2010 results, was submitted in March 2011 and finalized in November 2001 (TtNUS, 2011e). CY 2011 sampling rounds were conducted in March and September 2001 and the final CY 2011 Annual Report was submitted in June 2012 and approved in August 2012 (Tetra Tech, 2012d). Recommendations from the CY 2010 and CY 2011 Annual Reports were incorporated into the Long-Term Monitoring Plan and Revision 1 of the Plan was finalized and approved by DEQ and EPA in August 2012 (Tetra Tech, 2012e). CY 2012 sampling rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra tech, 2012f). The CY 2012 Annual Report, presenting the results of the September sampling and evaluating the calendar year results was submitted in June 2013 and finalized in May 2013 (Tetra Tech 2013b). CY 2013 sampling rounds were conducted in March and September 2013. A data report presenting the results from the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013c). The CY 2013 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2013 and finalized in February 2014 (Tetra Tech, 2014c). CY 2014 sampling rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was issued in July 2014 (Tetra Tech, 2014d). The CY'14 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2014 and finalized in April 2015 (Tetra Tech, 2015b). The spring 2015 sampling event was conducted in March 2015 and the data report issued May 2015 (Tetra Tech, 2015k). The fall or Tenth Round monitoring event was conducted in December 2015 and the data report issued in February 2016 (Tetra Tech, 2016b).

The eleventh event was completed September 28, 2016 and the Monitoring Data Report was issued January 3, 2017 (Tetra Tech, 2016g). The twelfth round of sampling was completed in June 2017 and the report was issued in November 2017 (NASA, 2017).

In accordance with the recommendations from the 2013 Five-Year Review, a sampling and analysis event for per- and polyfluorinated alkyl substances (PFAS) was conducted in December 2016. The draft data report presenting the analytical findings was submitted in February 2017. DEQ and EPA comments on the draft report were received February 28, 2017 and May 1, 2017, respectively. NASA submitted the final report in June 2017 (Tetra Tech, 2017a).

A Periodic Monitoring event (9-month) was completed March 28, 2018 and the Draft Monitoring Data Report was issued June 26, 2018 (NASA, 2018e). EPA approval was received on September 20, 2018. The next round of sampling (Round 14) was completed in December 2018 and the Draft Monitoring Data Report was issued April 24, 2019. Regulator comments were received on May 23 (DEQ) and May 24 (EPA). A revised FFTA Report was submitted on July 30, 2019.Additional comments were received from both the DEQ and EPA on September 4, 2019 and the final Report was submitted on September 30 (NASA, 2019b). EPA approval of the report was received on November 1, 2019 and DEQ approval was received on November 4, 2019. The next round of sampling is planned in March 2020.

The 2013 five-year review process was initiated in December 2012. Data review, site inspections, interviews and remedy evaluations were conducted through June 2013 when the draft Five-Year Review Report was issued for regulator review and comment. Regulator comments were received in November 2013 and resolved on January 8, 2014. The document was finalized in January and issued in February 2014 (Tetra Tech, 2014g). The review concluded that groundwater at the FFTA had not been tested for the presence of perfluorinated compounds (PFCs) [now referred to as PFAS], a class of emerging contaminants associated with firefighting foams which may have been used at the FFTA. The Five-Year Review Report recommended that groundwater at the Site be sampled and analyzed for PFC constituents. It was further recommended that the protectiveness statement for the FFTA remedy be deferred until an evaluation of PFC contamination is conducted. EPA issued a letter dated March 6, 2014 concurring with the findings and requiring the sampling, analysis and evaluation be completed before December 31, 2018 (EPA, 2014).

The draft of the 2018 Five-Year Review for this site was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019 (NASA, 2019a), with EPA concurrence on March 7. The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

Sections 4.0 and 5.0 of this report provide more details regarding this Site.

## Industrial/Sanitary Landfill

The Industrial/Sanitary Landfill is located south of the MB, see Figure 2-5. Historical records and photography indicate that this Site was used as a landfill/disposal area prior to NASA operations commencing in 1959. NASA did not use the area for any purpose and transferred the property to the U.S. Fish and Wildlife Service (USFWS) in July 1975. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that the Industrial/Sanitary Landfill should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). This site is addressed in the Baltimore Corps of Engineers Site Management Plan for Wallops Flight Facility FUDS sites. See Section 7 for activities conducted under the FUDS MOA.

## **Construction Debris Landfill**

The Construction Debris Landfill is located in the northeast corner of the MB, see Figure 2-5. Historical aerial photography indicates that the area was used as a disposal site prior to NASA operations commencing in 1959. NASA has not used the area for any purpose since property transfer. NASA, EPA, DEQ, and the USACE have reviewed available records and have concluded that the Construction Debris Landfill should be addressed through the FUDS program. This decision was documented in a Consensus Document signed by EPA, DEQ, and NASA in September 2004 (NASA, 2004). This site is addressed in the Baltimore Corps of Engineers Site Management Plan for Wallops Flight Facility FUDS sites. See Section 7 for activities conducted under the FUDS MOA.

#### Pistol/Rifle Range

A review of historical aerial photographs and records conducted by USACE, and a review of current facility practices identified the Pistol/Rifle Range as a potential AOC. The range was first noted as being present at WFF in the 1940's (MicroPact Engineering, 2003). The range is located in the northeast corner of the MB and was in use through 1999. The range is currently inactive and NASA has confirmed that it will not be reopened. Historical use of the Site was assessed as part of the ASR and it was determined that the Site had also been used by the Navy as a machine gun harmonizing range. Historical records also indicate the area immediately adjacent to the former Pistol Range housed a Rifle Range and a Skeet Range. A SI Work Plan to investigate the entire range area (Main Base Firing Range Complex) was finalized in May 2007 (TtNUS, 2007d). The Work Plan was approved by EPA and DEQ in August 2007.

Field investigations were completed in November 2007 and the draft SI Report was submitted in March 2008. Regulator comments were received in June and resolved in October 2008. The final SI Report was issued in November 2008, revised in February in response to additional DEQ comments, and approved in March 2009 (TtNUS, 2009g). Based on the SI report, it was agreed that NASA should consider pursuing a Non-Time Critical Removal Action at the Site. NASA completed a review of the site findings and presented proposed removal action cleanup goals in a draft technical memorandum in April 2009. The approach was reviewed and discussed with EPA and DEQ through June 2009 and the final approach was agreed to in a teleconference documented in a summary report issued in June 2009 (TtNUS, 2009h). As agreed to in the teleconference, NASA conducted a supplemental soil sampling and analysis program in the northern drainage area associated with the Site. The analytical results and findings were presented in the Summary for Supplemental Soil Sampling Main Base Firing Range Complex Report issued in August 2009 (TtNUS, 2009i). Concurrent with these activities NASA initiated a review of historical site use to determine if NASA funds could be used to conduct the removal or if the site should be referred to the FUDS program. As a result of this evaluation, the USACE acknowledged responsibility for the Former Skeet Range as a FUDs site. See Section 7.1.7 for activities conducted under the FUDS MOA at the Skeet Range.

Further evaluation of historical use and responsibility for the remaining portions of the range complex was under discussion between NASA and the USACE into FY 2014. In FY 2014, NASA agreed to accept responsibility for further investigation and actions related to the former pistol and rifle ranges (Pistol/Rifle Range). NASA conducted a review of historical investigations at the Pistol/Rifle Range and prepared a summary report presenting site data and reevaluating risks at the site. The Site Summary and Risk Re-Evaluation Report was issued in August 2014, finalized in February and submitted in March 2015 (Tetra Tech 2015c). A sampling and analysis plan for supplemental sampling at specific sampling points at the ranges was finalized in May 2015 (Tetra Tech, 2015d). The sampling was conducted in June and the data report issued in July 2015 (NASA, 2015a). Based on the results of completed investigations, it was agreed that a NTCRA is an appropriate action to address contamination at the site. An Engineering Evaluation Cost Analysis (EE/CA) was prepared in 2015 and finalized in December 2015 (Tetra Tech, 2015m). After completion of a public comment period, a final Action Memorandum (AM) documenting the need to proceed and authorizing the action was issued in April 2016 (NASA, 2016). A final Removal Action Work Plan (RAWP) was issued in May 2016 (Tetra Tech, 2016e). The removal action was completed during the summer and the Construction Completion Report was submitted for regulator review in November 2016. The Construction Completion Report was finalized in March 2017 (Tetra Tech, 2017b) and NASA, EPA, and DEQ signed a NFA Consensus Statement on March 21, 2017. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

FY-'20-'21 SMP

#### South End Disposal Area (SEDA)

The SEDA consisted of an elevated berm oriented perpendicular to the Atlantic Ocean shore line at the southern end of Wallops Island. The berm was approximately 50 feet long and up to 20 feet wide. The SEDA was identified as an AOC in late 2009 after a series of severe storms caused significant beach erosion and the presence of military munitions and concrete and metal debris were discovered at the base of the southern berm. NASA secured the area and an Air Force Explosive Ordnance Disposal (EOD) unit from Dover Air Force Base responded and treated the munitions on site. The EOD unit identified the munitions as 3.5-inch M28 and M29 Rockets. Because of their unknown source and the possible presence of additional munitions, NASA installed and maintained temporary fencing along the southern end of the island and restricted access to the area of concern. In addition, NASA-trained security personnel conducted visual inspections of the area after subsequent storms to coordinate additional response actions, as necessary.

In 2010, NASA conducted a limited response action, consisting of excavating the berm and shallow soils and the inspection/survey, removal and treatment of MEC. A report summarizing the Early Action was prepared and finalized in February 2011 (TtNUS, 2001b). In addition, NASA conducted a PA of the SEDA to support a decision regarding the need for further actions at the Site. The final PA Report was submitted and approved in September 2012 (Tetra Tech, 2012g). A Letter Work Plan/Sampling Analysis Plan for collecting a series of screening samples at the Site was finalized in September and approved on October 2012 (Tetra Tech, 2012h). Sampling was conducted in November 2012 and data findings were presented in a Site Screening report in April 2013 and finalized in February 2014 (Tetra Tech, 2014e). EPA and DEQ signed a NFA Concurrence Statement in February and March 2014, respectively. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

#### Area of Interest – 20 Transformer (AI-20)

Al-20 is a pole-mounted transformer located at the north end of Wallops Island, see Figure 2-11. Al-20 was identified during a PA conducted by USACE under the FUDS Program. The PA consisted of a review of aerial photo analysis, site reconnaissance and employee interviews. The pole-mounted transformer at Al-20 is an abandoned remnant of power supply structures installed by the Navy in the 1950s. The Al-20 transformer likely contains/contained PCBs, because they were used as coolants and lubricants in transformers from 1929 until 1977. A SI at Al-20 was conducted by USACE in 2012. Three surface soil samples were collected around the pole-mounted transformer and were composited into one sample to determine the presence of PCBs. The USACE reported that PCBs were detected in the soil at 20,000,000 micrograms per kilogram (µg/kg) in the primary sample and 51,000,000 µg/kg in the duplicate sample. The exact sample locations and the raw laboratory analytical results from the initial investigation

are not available. In 2013, NASA, DEQ and EPA conducted a joint site reconnaissance of AI-20 and the transformer was found dangling from the pole and was suspected to be damaged.

In 2014, NASA decided to take responsibility for follow-up investigations at AI-20. NASA discussed possible response actions with EPA and DEQ and initiated a site screening investigation to confirm the presence of PCBs and provide data to plan further response actions. The Site Screening Work Plan was finalized in September 2014 (Tetra Tech, 2014j). Field work was conducted in November 2014 and Characterization Report was submitted in February and finalized in May 2015 (Tetra Tech, 2015e). Based on Site findings, it was determined that a time-critical removal action (TCRA) was warranted to address contamination at the site. An Action Memorandum authorizing a TCRA was prepared in March 2015 and finalized in July 2015 (NASA, 2015b). A Removal Action Work Plan (RAWP) was submitted in April 2015 and finalized in July 2015 (Tetra Tech, 2015f). The removal action was conducted from August through September 2015 and the report presenting details regarding the action was finalized in July 2016 and a No Further Action Decision Concurrence Statement was signed by EPA, DEQ, and NASA in September 2016 (NASA, 2016a). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

## North Island Transformers

The North Island Transformers Site includes 17 former electrical poles/transformers that are located in the northern portion of Wallops Island, see Figure 2-1. The pole locations were identified on historical facility drawings during the USACE initial assessment of AI-20. The investigation of AI-20 prompted additional review of aerial photos and site reconnaissance by NASA to determine if other transformers remained on the island. The analysis identified 17 additional former transformer locations. The northern portion of Wallops Island is largely undeveloped, with a few roads, and is dominated by wetlands, marshes, and maritime forests, and open brush lands. NASA site reconnaissance located some of these transformers and found a variety of site conditions including the presence of a pole stub only, transformer remnants on the ground, or transformers that are still attached to the pole. Further investigation of these sites was delayed into 2014, while responsibility for conducting further assessment of the 17 locations was discussed with the USACE.

In 2014, NASA decided to take responsibility for follow-up investigations of North Island Transformers. NASA discussed possible response actions with EPA and DEQ and initiated a site screening investigation to determine if transformers and/or PCB contamination exists at the 17 locations. The Site Screening Work Plan was finalized in October 2014 (Tetra Tech, 2014k). Field work and soil sampling was conducted in November and December 2014 and the Site Screening Report issued in February and finalized in August 2015 (Tetra Tech, 2015g). Based on the site screening it was determined that further

screening was required at nine of the former transformer locations [North Island Transformers (NIT)] and actions were required at four others (NIT-1, NIT-7, NIT-14 and NIT-17). A Characterization Work Plan for NIT-1 and NIT-17 was finalized in June 2015 (Tetra Tech, 2015h). The additional characterization field work and sampling was conducted in July 2015 and the report of findings submitted in October 2015 and finalized in January 2016 (Tetra Tech 2016c). An AM documenting the need for and authorizing a time-critical removal action was signed and issued in January 2016 (NASA, 2016b). A final RAWP was issued in February 2016 (Tetra Tech, 2016d). The removal action at NIT-1, NIT-7, NIT-14 and NIT-17 was implemented from March through April 2016. A public notice regarding the action was issued in March 2016. The final report was submitted in December 2016 (Tetra Tech, 2016h). On March 21, 2017, NASA, EPA, and DEQ signed an NFA Consensus Statement for NITs -1, -7, -14, and -17.

Supplemental screening plans for the other NIT locations was approved in the final Supplemental Site Screening Work Plan Addendum issued in July 2015 (Tetra Tech, 2015i). The site sampling was conducted in September 2015 and the findings were presented in a final Technical Memorandum issued in February 2016 (NASA, 2016c). Based on the findings, a No Further Action Consensus Document addressing the final 13 transformer locations was finalized in July and the NFA Concurrence Statement signed in September 2016 (NASA, 2016d). Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Structures F-10A/F-10B (Paint Locker and Battery Shop)

Structures F-10/F-10B are located in the western portion of the industrialized area of Main Base, see Figure 2-5. The buildings were identified as a Site in FY 2016. The two buildings were constructed and used during the Navy tenure at WFF and have been used by NASA since 1960. Building F-10A has been used for temporary storage of drums containing oils, solvent and lubricants while building F-10B has been used to store batteries and has housed a metal cutting and paint shop. A work plan for conducting a Site Screening at F-10A/F-10B was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft Site Screening Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at Remedial Project Manager (RPM) Meetings and resolution of regulator comments on the report is ongoing. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Structure N-166 (Alcohol Storage Building)

Building N-166 is a one-story cinder block storage shed located in the southeastern portion of the industrialized area of Main Base, see Figure 2-5. Building N-166 was built during the Navy operations and

used at that time for alcohol storage and for packaging explosives. The building has been used by NASA for storage of building components and office supplies and records. Samples of nearby soils and groundwater were collected as part of other ongoing USACE investigations. A work plan for conducting a Site Screening to supplement existing data at FN-166 was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft Site Screening Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments on the report is ongoing. Based on these comments, EPA and DEQ are expected to approve No Further Action (NFA) for this site. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

# Former Circular Area (FCA)

The FCA is an area that was originally noted as a potential disturbed area on historical aerial photographs and is south of the Boat Basin, see Figure 2-5. The area was initially investigated under the ongoing USACE Project 7 RI. Geophysical surveys conducted within the FCA suggested the presence of buried materials and metals. Test pit excavations of the most prominent anomalies within the FCA uncovered construction, road, and building debris. As Project 7 concentrates on munitions related investigations the area was eliminated from further study under Project 7. NASA accepted the primary role of conducting further screening investigations of the FCA during FY 2016. A work plan for conducting a Site Screening of the FCA was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft Site Screening Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments on the report is ongoing. Sections 4.0 and 5.0 of this report provide more details regarding this Site.

#### PFAS Sampling

In response to detecting the presence of PFAS compounds in the FFTA groundwater, NASA initiated a drinking water sampling program. On April 7, 2017, NASA submitted a draft work plan for sampling and analyzing NASA and the Town of Chincoteague water supplies and select monitoring wells for PFAS. To supplement this planned sampling, NASA prepared and submitted a work plan Addendum to advance soil borings and collect groundwater grab samples at the western boundary of the facility. EPA and DEQ had no comments on the draft Work Plan. DEQ had no comments on the Addendum and EPA comments on the Addendum were received April 10, 2017. Response to comments and the final Addendum were issued April 19, 2017. EPA and DEQ concurred with the Addendum and the final Addendum was

approved on April 19, 2017. NASA conducted sampling in April and May 2017. A draft report of these activities was submitted in July 2017 with the final report submitted in October 2017 and approved by the regulators that same month (Tetra Tech, 2017c). NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies and has established a working group of stakeholders to ensure a consensus on ongoing actions.

The water supply sampling and analysis program (including WFF wells, TOC wells, and Trails End Campground wells) continues and is adjusted and directed, with input from the stakeholders listed above, as analytical results become available. A Public Information Session to discuss the sampling and results was held on June 14, 2017 at the WFF Visitor Center.

NASA completed installation and sampling of shallow and deep perimeter monitoring wells to determine the potential for off-site migration of PFAS. During these field activities, additional shallow observation wells were installed, sampled, and used to collect continuous water levels to determine if a connection exists between the shallow and deeper aquifers at WFF. The field work took place in September, October, and November 2017. Work was based on the Perimeter Monitoring Well Work Plan submitted as a draft in July 2017 and the Aquifer Testing Work Plan submitted as a draft in August 2017. After resolution of regulator comments, EPA and DEQ approval of these Work Plans was provided in August (Tetra Tech, 2017d) and October 2017 (Tetra Tech 2017e), respectively. A Draft Data Report for PFAS perimeter monitoring and observation well installation and sampling was submitted on March 15, 2018. EPA comments were received on August 15, 2018; on August 8, 2018, DEQ accepted the report with no Responses to the EPA comments were submitted on November 28, 2018. The EPA comments. accepted the responses on January 31, 2019 and the Final report was submitted on February 8, 2019 (NASA, 2019c). Following installation, guarterly sampling of these wells has continued. A draft annual report, covering the sampling through June 2018, was submitted on February 6, 2019. DEQ comments were received on February 27, 2019 and EPA comments were received on March 28, 2019. NASA submitted responses to comments on September 11, 2019; EPA and DEQ approved the responses on September 12, 2019 and September 16, 2019, respectively. The final annual report was submitted on September 27, 2019 (NASA, 2019d). DEQ final approval was received on November 4, 2019. EPA final approval was received on December 20, 2019.

Sampling since the last SMP (December 2018) has included monthly (bi-monthly during the summer months) sampling of the WFF drinking water wells and WFF finished drinking water and the Town of Chincoteague drinking water wells and finished drinking water. The water supply sampling and analysis program continues on a monthly basis and is adjusted and directed as analytical results become available. In June 2018, NASA also collected samples from the Trail's End Utility Company (TEUC) wells

(#5, #6, and #7) and TEUC blended drinking water. To this point, no finished drinking water samples have contained PFAS above the EPA HA.

NASA also submitted a Draft Preliminary Assessment and Site Investigation (SI) Work Plan for PFAS at WFF on May 24, 2018. DEQ indicated on June 19, 2018 that it did not have comments. EPA comments were received on July 12, 2018. The revised Work Plan with responses to comments was submitted on November 1, 2018. EPA and DEQ comments on the revised Work Plan were received on February 20 and 21, 2019, respectively. EPA concurred verbally to the responses on March 5, 2019 and approved finalization of the report and with NASA starting field activities. The final Work Plan was submitted on March 29, 2019 (NASA, 2019e). DEQ approval was received on April 8, 2019. EPA approval was received on December 20, 2019. Field work was completed from April through September 2019. The results through the initial sampling were discussed in a meeting with EPA, DEQ, and other stakeholders on July 10, 2019 and additional sampling was agreed upon. The draft SI Report will be submitted in December 2019. At the September 2019 RPM Meeting, it was agreed that additional surface water sampling would take place quarterly for a period of one year; the first round of this sampling occurred in October 2019.

# **3.0 REGULATORY PROCESS ACTIVITIES**

The AAOC describes the major milestones or phases of the work to be completed at WFF and identifies Superfund (or CERCLA) as the primary regulatory process guidance to be used in completing the work to be performed under this SMP (U.S. EPA Docket Number: RCRA-03-2004-0201TH). This section briefly describes the major investigation and remediation phases that will be implemented under this SMP in accordance with the AAOC. The most recent EPA guidance available describing the methods to be used in performing specific activities under these phases will be consulted and applied in implementing this SMP.

# 3.1 DESCRIPTION OF CURRENT SITE CONDITIONS

The AAOC requires that this SMP present a description of current site conditions, identify the AOCs and Sites, propose actions necessary to protect human health and the environment, and provide schedules for those activities. Section 2.0 of this SMP presents the current site conditions and identifies the AOCs. Sections 4.0 and 5.0 present the proposed actions and schedules for those Sites addressed under this SMP.

# 3.2 SITE SCREENING PROCESS

The AAOC does not specifically include a site screening process but the guidance referenced in the AAOC does. Under the Superfund Guidance, the site screening process consists of conducting a PA and SI. These investigations can be performed in sequence or as a combined evaluation. The PA is a limited-scope investigation performed to collect readily available information about a site and its surrounding area. The PA is designed to screen sites or to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites requiring assessment for possible removal or early actions. If the PA results in a recommendation for further investigation, a SI is performed (EPA, 1991; EPA, 1999).

The SI provides the data needed to complete a screening level evaluation of the potential risks posed to human health and the environment. SIs typically include the collection of environmental and waste samples to determine what hazardous substances are present at a site. The data is used to determine if these substances are being released to the environment and assess if they have reached nearby targets. The SI can be conducted in one stage or two. The first stage, or focused SI, typically focuses sampling efforts to determine the presence or absence of contamination at areas of suspected release and migration to yield information sufficient to determine if further investigations are necessary to characterize

the site risks. If further information is necessary to characterize the risks either an expanded SI or RI is conducted (EPA, 1992; EPA, 1999).

To be consistent with the AAOC, work plans for conducting site screenings should be prepared and submitted to EPA for review and approval and DEQ for review and concurrence. The work plan should identify if a PA, SI or combination PA/SI is to be performed and be designed to determine the presence of hazardous substances, determine if a release has occurred, and to collect sufficient information to evaluate the potential human health and ecological risks posed by the migration of hazardous substances to receptors. The work plan shall include a data collection and quality assurance plan, data management plan, and a description of reporting requirements. A health and safety plan (HASP) shall be submitted to EPA and DEQ concurrent with the work plan.

### 3.3 EARLY ACTIONS

An early action (EA) is an action taken to mitigate immediate or potential threats to human health or the environment. EAs may be performed at any time throughout the investigation/remediation process to address such threats. These actions are typically taken as an interim measure to address imminent threats, to mitigate a release, or to minimize a source at a site. However, EAs should also be consistent with any long-term remedial measures that may be required for the site. The performance of an EA requires an EPA-approved work plan. DEQ concurrence on the work plan will also be requested.

The EA work plan should identify one or more actions to be taken to address the threat to human health or the environment. The work plan is to include, as appropriate, a statement of the EA objectives, a public involvement plan, data collection and management plans, designs and specifications, construction schedules and quality assurance plans, operation and maintenance plans, and reporting requirements. A HASP shall also be made available to EPA and DEQ at the time of work plan submittal.

### 3.4 REMEDIAL INVESTIGATIONS

A RI is performed at sites where a release has been confirmed and where that release poses an unacceptable risk to public health and/or the environment. Where an EA addresses imminent threats, the RI typically is performed to define the need for actions necessary to mitigate long-term threats. To support this objective, the RI should be designed to define or characterize the source of and the nature and extent of contamination, characterize the contaminant migration pathways, define the actual or potential risks to receptors, and provide data sufficient to support the development of remedial alternatives (EPA, 1988).

An EPA-approved work plan is required for the performance of an RI. DEQ concurrence on the work plan will also be requested. The work plan shall include a management plan, data collection quality assurance plan, data management plan, community involvement plan, and schedule to meet the objectives described above. A HASP should also be made available to EPA at the time of work plan submittal.

### 3.5 FEASIBILITY STUDIES

A FS is required when the RI identifies that site-related contaminants present an unacceptable risk to human health or the environment. EPA has defined the cancer risk range of 10<sup>-4</sup> to 10<sup>-6</sup> as the "target range" or maximum "acceptable risk range" for most sites evaluated under the CERCLA program. This risk range represents the potential for contaminant exposure to cause one additional case of cancer in a population of ten-thousand people to one additional case of cancer in a population of one million people. Cumulative cancer risks greater than 10<sup>-4</sup> generally will indicate that some degree of remediation is required, and cancer risks below 10<sup>-6</sup> normally will not result in remedial efforts. When the calculated risk falls between 10<sup>-4</sup> and 10<sup>-6</sup>, decisions are typically made on a case by case basis. Noncancer risks are evaluated using the Hazard Index (HI) system. EPA has established this system to evaluate the potential for noncarcinogenic health effects of contamination. An HI of 1.0 or less is not expected to result in adverse health effects. The HI for an exposure scenario and for specific target organs are both evaluated under this system. In general, if the total HI exceeds 1.0 then the specific target organs expected to be affected by the contaminants are further evaluated to determine the HI for that organ. The HI value is not a numeric indication of risk. Rather, an HI that exceeds 1.0 indicates that a noncancer health effect cannot be ruled out. The need to take actions based on the HI is typically made on a case by case basis. Risks to the environment are evaluated by assessing the potential impacts of site-related contamination EPA has established numerical screening methods and risk evaluation to ecological receptors. guidelines for the performance of ecological risk assessments. However, the need to take action based on ecological risks is typically made on a case by case basis considering the results of site-specific studies and evaluations.

The purpose of an FS is to define the goals or end points required to mitigate an unacceptable risk and to identify a range of remedial alternatives that meet those goals. The FS shall, at a minimum, develop a list of remedial alternatives, and screen and evaluate those alternatives according to the latest EPA guidance. The evaluation or analysis of alternatives shall be conducted to provide sufficient information to allow for the comparison of alternatives and, when combined with risk management judgments, the selection of a site remedy that satisfies CERCLA requirements (EPA, 1988).

The FS is to be submitted to EPA for review and approval and DEQ for review and concurrence and provides the basis or rationale for selecting a preferred alternative which is to be presented in a Proposed Remedial Action Plan (PRAP).

# 3.6 PUBLIC COMMENT AND PARTICIPATION

### 3.6.1 Proposed Remedial Action Plan

The public is to be provided an opportunity to comment on and participate in the selection of a remedy. After EPA approval of the FS, the remedial alternative preferred by NASA will be presented in a PRAP. The purpose of the PRAP is to solicit public involvement in the remedial selection process. The PRAP should briefly describe the remedial alternatives analyzed in the FS, propose the preferred alternative, and provide the rationale that supports the proposal of the preferred alternative (EPA, 1999). The PRAP, along with the final RI and FS, are to be made available to the public for review and comment for at least 30 days before the final selection of a remedy.

# 3.6.2 Record of Decision

Comments received from the public will be evaluated and presented with responses in a Record of Decision (ROD). The purpose of the ROD is to document the selection of the RA to be implemented. The ROD is a legal document that certifies that the remedy selection process was performed in accordance with CERCLA requirements. The ROD also serves as a technical document that summarizes the information presented in the RI and FS, provides sufficient information to support a conceptual design of the final remedy, and defines the remedial action objectives and cleanup levels to be achieved (EPA, 1999). NASA and EPA, after consulting with DEQ and requesting concurrence, will jointly select the final remedy to be documented in the ROD. The final ROD will be made available to the public and a notice of its availability will be published.

# 3.7 REMEDIAL DESIGN/REMEDIAL ACTION

### 3.7.1 <u>Remedial Design</u>

After issuance of the ROD, a remedial design (RD) shall be prepared. The RD establishes the scope and character of the final remedy and provides the technical details and requirements, including construction and technical specifications and schedules, for implementing the remedy. The RD must clearly define how the remedial action objectives and goals defined in the ROD will be achieved (EPA, 1995; EPA, 1995a).

An EPA-approved RD work plan is required for the preparation of a RD. The RD work plan shall clearly state the remedial action objectives and goals presented in the ROD, define the RA to be implemented, and provide the rationale or basis for the design of the remedy. The RD work plan will be submitted to DEQ for review and concurrence. The work plan will include a listing of deliverables to be provided as part of the RD and a schedule for completion of the RD.

The RD must be approved by EPA before it is implemented.

# 3.7.2 <u>Remedial Action</u>

Remedial action (RA) is the implementation of the RD. Before the RD is implemented, a RA work plan must be prepared and submitted to EPA for review and approval and DEQ for review and concurrence. The RA work plan should include a management plan, reference the RD, identify the means and methods to be used in implementing the RD, and present schedules for completion of the action. A RA HASP shall also be prepared concurrent to the RA work plan.

The RA will be implemented in accordance with the EPA-approved RA work plan.

# 3.7.3 <u>Remedial Action Completion</u>

A remedial action completion (RAC) report will be prepared after the complete implementation of the RA. The RAC report will be submitted to EPA for review and approval and DEQ for review and concurrence. The RAC report shall be prepared after the physical construction of the RA or implementation of the RA is complete. The report shall describe the activities performed during the implementation, provide actual specifications for components of the implemented remedy, and present an initial assessment of the RA performance. The purpose of the RAC report is to provide sufficient detail to document that the implemented remedy is consistent with the EPA-approved RD and the requirements set forth in the ROD, and to support the preparation of long-term monitoring (LTM) and operation and maintenance (O&M) plans.

# 3.7.4 Remedial Action Monitoring and O&M Plans

Remedial action monitoring and O&M plans for measuring the effectiveness of and maintaining the components of the RA must be prepared and submitted, where appropriate, to EPA for review and approval and to DEQ for review and concurrence.

LTM plans shall state the remedial action objectives and goals, present the methods to be used in monitoring the performance of the RA, establish schedules for conducting the monitoring, define the criteria that will be used in determining the effectiveness of the remedy and for determining when the remediation goals have been achieved (decision criteria), and outline the reporting components that will be included in the RA assessment report (EPA, 2004).

The O&M plan is required to define what measures are necessary to ensure that the remedy remains protective of human health and the environment. The plan should define the administrative and technical details and requirements for inspecting, operating and maintaining the RA (EPA, 2001).

# 3.7.5 <u>Remedial Action Assessment Reports</u>

RA assessment reports provide a means to determine if the RA is performing in accordance with the requirements of the ROD and for determining when the cleanup goals have been achieved. RA assessment reports will be submitted to EPA for review and approval and DEQ for review and concurrence in accordance with the requirements of the LTM plan. The RA report will present the results and activities generated from the implementation of the monitoring and O&M plans and may be used to propose modifications to those plans (EPA, 2004).

### 3.7.6 Five-Year Review Reports

No later than five years after the commencement of the RA and every five years thereafter until a Certificate of Completion is issued by EPA, a Five-Year Review Report will be submitted to EPA for review and approval and DEQ for review and concurrence. The purpose of the Five-Year Review Report is to present an evaluation of the past and projected effectiveness of the RA in attaining the performance criteria defined in the RD and to determine whether or not it remains protective of human health and the environment. The five-year review should include a review of the remedial action objectives and cleanup goals, the RAC report, past RA assessment reports and O&M records, a site inspection, interviews, and an evaluation of the validity of the cleanup goals and the effectiveness of the remedy in meeting those goals and the objectives stated in the ROD (EPA, 2001a). The Five-Year Review report may also be the basis for recommending modifications or changes to the selected remedy or for proposing an alternative remedy (U.S. EPA Docket Number: RCRA-03-2004-0201TH).

FY-'20-'21 SMP

### 3.8 CERTIFICATE OF COMPLETION

When NASA performs an RA and attains the media cleanup standards and remedial action objectives described in the ROD and no remedial action monitoring and/or operation and maintenance are required, NASA will include in the RACR a request for a Certificate of Completion. The RACR shall provide documentation sufficient to support a determination that media cleanup standards and remedial action objectives have been attained and include all available documentation supporting such a determination. In this case, upon approval of the RACR, the EPA shall issue a Certificate of Completion for the site.

When NASA has fully performed an RA that includes remedial action monitoring and/or operation and maintenance and the media cleanup standards and remedial action objectives described in the ROD have been attained, NASA shall submit a Site Close-Out Report for all RAs to EPA for approval. The Site Close-Out Report shall provide documentation sufficient to support a determination that media cleanup standards and remedial action objectives have been attained and remedial action monitoring and/or operation and maintenance plans are in place and will include all available documentation supporting such a determination. Upon approval of the Site Close-Out Report, the EPA shall issue a Certificate of Completion for the site.

# **4.0 SITE DESCRIPTIONS AND GROUPINGS**

Section 2.0 of this SMP presents a summary of the current facility conditions, provides a brief summary of the AOCs, and identifies the sites to be addressed under this SMP (SMP Sites). Those AOCs identified as being addressed under the FUDS program (see Section 2), are addressed in Section 7. Section 3.0 defines the regulatory process activities that could be performed at the SMP Sites. This section presents a brief overview of the response actions completed to date and outlines the work to be performed at each of the SMP Sites. A brief description of each site, the remedial activities conducted or ongoing at the site, as well as the nature and extent of contamination, potential migration pathways, and potential for adverse impact to human health and the environment are presented in summary-of-findings tables 4-1 through 4-16. These tables also present the planned actions to be completed over the next two fiscal years.

# 4.1 SITE DESCRIPTIONS

#### 4.1.1 <u>Maintenance Facility (Site 2)</u>

Available information indicates that Site 2 was utilized by the Navy as a maintenance facility and motor pool. The former building was also used by NASA as a storage and maintenance area for landscaping contractors. The EPA conducted an aerial photographic study of the area that included the review of available photographs from 1938 through 1994 (EPA, 1996). The EPA study indicated that the Building E-52 area contained two horizontal tanks, soil staining and large areas of open storage in 1957. By 1967, the horizontal tanks and the majority of the materials previously visible in the storage yard were no longer present and much of the former storage yard was re-vegetated. Building E-52 was demolished by NASA in 1994. In 2003, NASA removed the Building E-52 cement slab and the tar and gravel parking lot and roadway to the west of the building and constructed a new parking lot and roadway in the area. There are no surface water bodies in close proximity to Site 2.

Building E-52 was designated as Site 2 during the PA/SI process conducted at WFF from 1988 through 1993. The PA/SI process consisted of a series of records reviews and soil gas surveys, a magnetometer survey, and the collection and analysis of surface and subsurface soil samples. Soil gas surveys were conducted in 1988, 1990, and 1993 (Metcalf & Eddy, 1996). The surveys were conducted around the perimeter of Building E-52, in areas identified as former drum storage and fuel tank locations, and throughout the open field surrounding the building. As a result of these surveys, two areas immediately north of Building E-52, between the building and a gravel access road and wash rack area, were identified as areas of concern. The highest soil gas results indicated the possible presence of xylene isomers and tetrachloroethene (PCE) in the samples collected from this area (Metcalf & Eddy,

1996). The PA and SI reports indicate a former tank location and concrete pad, but do not indicate the presence of any tanks during the investigations. There are no tanks currently present at the Site and there are no records as to when the tanks were removed.

Surface and subsurface soil samples were collected at Site 2 between June 29 and August 12, 1993. Five surface soil samples were collected from areas of stained soil around the perimeter of Building E-52. Ten borings were advanced in the areas of the highest soil gas readings, the open field, and in the "tar and gravel" parking lot surrounding Building E-52. Ten subsurface soil samples, ranging in depth from 2.5 feet to 7 feet below ground surface, were collected from the borings. All of the soil samples were analyzed for target compound list (TCL) volatile and semi-volatile organics, pesticides and PCBs and target analyte list (TAL) metals. The analytical results were validated in accordance with EPA data validation guidelines (Metcalf & Eddy, 1996).

Surface soil results indicated the presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, petroleum hydrocarbons, and metals. PCBs and cyanide were not detected in any of the samples (Metcalf & Eddy, 1996).

Subsurface soil results indicated the presence of SVOCs, pesticides, petroleum hydrocarbons, and metals. During the field sampling, a subsurface stained layer was noted to the north, east, and south of Building E-52. The layer was reportedly approximately four feet thick and was first visible at approximately two feet below the surface. The stained layer was described as grey or black clay with a strong odor. Available information does not indicate what type of odor was apparent from the stained layer (Metcalf & Eddy, 1996).

The deepest contamination detected at the Site was approximately seven feet below the surface and groundwater is expected to be found at approximately twenty feet below the surface. No groundwater samples were collected from Site 2. The SI report recommended that no further action be conducted at the Site unless groundwater contamination was suspected (Metcalf & Eddy, 1996).

In 2003, NASA conducted an evaluation of the existing data and compared the available analytical results to EPA Region 3 industrial and residential Risk Based Concentrations (RBCs) and EPA Soil Screening Levels (SSLs) for the protection of groundwater. The maximum Site 2 concentrations for several pesticides and metals were found to exceed the screening criteria. Based on these findings and the past history of the Site, NASA, EPA, and DEQ concurred that additional investigations at Site 2 were warranted. Because the existing data was limited, it was determined that a Supplemental or Expanded SI should be conducted. A work plan for the investigation was finalized in 2004 and approved by EPA and DEQ in 2005 (TtNUS, 2004f). The Expanded SI was conducted in 2005 and consisted of installing and

sampling groundwater monitoring wells, and a phased sampling of surface and subsurface soils. The findings, including an evaluation of the nature and extent of contamination, possible sources, and an evaluation of potential human health and ecological risks, were presented in a series of interim and final reports issued in 2005 and 2006. The final Expanded SI Report was issued in August 2006 (TtNUS, 2006). NASA, EPA, and DEQ considered the contaminant levels, risk evaluations, and applicable regulations and reached a consensus that No Further Action was required for Site 2. This decision was documented in a Concurrence Statement issued with the Final Expanded SI Report in August 2006 (TtNUS, 2006). A summary of site findings and the current status of the Site are presented in Table 4-1.

#### 4.1.2 Island Debris Pile (Site 4)

Site 4 consists of a 400-foot long and 10 to 40-foot wide debris pile located in a heavily vegetated and isolated area of WI in close proximity to wetlands. The Site was assessed as part of a facility wide SI conducted in 1996 (Metcalf & Eddy, 1996). As indicated in Section 2.0, there are no groundwater supply wells on WI and drinking water is supplied from the ML.

Three surface and subsurface soil samples were collected from the site in 1996 (Metcalf & Eddy). The surface soils were analyzed for PCBs and the subsurface soils were analyzed for TCL organics, TAL metals, and Total Petroleum Hydrocarbons (TPH). In addition, one sample of material from the debris pile was analyzed for asbestos. The sample results were compared to background levels collected at the time of the inspection. SVOCs, metals, pesticides, and petroleum hydrocarbons (diesel fuel) were found to be above background levels in one or more samples. Asbestos was confirmed to be present in the one sample of debris collected.

Considering the general lack of available data and the site conditions, NASA, EPA and DEQ agreed in FY 2005 that further response actions were required to complete the evaluation of Site 4 risks (NASA, 2004c; NASA, 2004d). It was also agreed that prior to implementing a SI a detailed review of past ordnance-related activities should be performed (NASA, 2005). As indicated in Section 2.2, NASA funded the USACE to perform an ASR to investigate the possible use of the Site prior to 1959 and to identify the potential for ordnance or MEC at the Site. Information presented in the ASR indicated that unexploded ordnance (UXO) is not likely present at the Site (USACE, 2005). However, available information also indicated that the debris pile was in existence prior to 1959 and may have been used by the Navy for disposal of materials before the property was transferred to NASA (USACE, 2005; EPA, 2004). A subsequent inspection of the Site confirmed the presence of materials that may be indicative of the types of material used by the Navy, including film and creosote preserved poles, as well as other materials including construction debris, metal and wood debris, automotive parts, and general discarded

office and maintenance shop containers and supplies (NASA, 2004c; USACE, 2005). In 2006, NASA conducted a follow-up review of available NASA records regarding the possible use of the area and conducted a thorough visual investigation of the materials present at Site 4. In addition to confirming previous findings, this review also identified scrap items present at the Site that were associated with NASA-related activities (TtNUS, 2006b). Based on these findings it was determined that NASA would proceed with the required investigations at Site 4. In 2006, The Project Team reviewed the conceptual approach for conducting a BMP action at the Site and reached a consensus to implement the plan prior to conducting the SI (NASA, 2006). The Work plan for the BMP activities was finalized in September 2006 (URS, 2006). Waste characterization sampling was conducted in October 2006 and debris clearing as part of the BMP was conducted in February 2007. A summary of site findings was prepared and presented as an Appendix to a Draft SI Work Plan submitted in June 2007. The SI Work Plan was finalized in January 2008 and approved in March 2008 (TtNUS, 2008).

SI field investigations were conducted in April 2008. The initial sample results were shared with the Project Team in June 2008. Based on a review of the analytical results the Project Team agreed to conduct follow-up soil sampling to address any potential data gaps. The additional field investigation work was completed in July 2008 and the draft SI Report was submitted in December 2008. Regulator comments were received in February and resolved in March 2009. The final SI Report was issued and approved by the regulators in April 2009 (TtNUS, 2009). The SI findings were discussed with EPA and DEQ during the December 2008 Remedial Project Managers' meeting and it was tentatively agreed that NASA should consider pursuing a Non-Time Critical Removal Action for soils at the Site, targeting PAH hotspot removal (NASA, 2008). Upon finalization of the SI, NASA prepared and submitted a Technical memorandum summarizing the SI report findings and proposing removal action cleanup goals (TtNUS, 2009j). The approach was discussed through several teleconferences with EPA and DEQ and a Draft Engineering Evaluation/Cost Analysis (EE/CA) was prepared and submitted for regulator review in October 2009. Regulator comments were received in December and resolved in February 2010. The final EE/CA was issued in February 2010 and approved by regulators in March 2010 (TtNUS, 2010a).

A 30-day public review and comment period for the EE/CA was held from February 17 to March 17, 2010. No public comments were received during the public comment period. During the same period, an Action Memorandum (AM), which documents the decision of a NTCRA was developed and submitted for regulator review. The draft was submitted in January 2010 and regulator comments were received and resolved and the AM finalized after the close of the public comment period. The Final AM was signed by NASA in April 2010 (TtNUS, 2010b). Based on the selected alternative, a RAWP was developed. A draft RAWP was submitted for regulatory review in April 2010. Regulator comments were received in June

and were resolved in July 2010. A final RAWP was issued in July and approved in November 2010 (TtNUS, 2010c)).

In accordance with the final RAWP, pre-construction sampling to confirm the excavation area and characterize disposal conducted August/September the soils for was in 2010. Results from the sampling event were summarized to the Team during the September 2010 RPM Meeting and presented in a RAWP Addendum (TtNUS, 2010). The removal action was implemented from January 2011 through April 2011. A draft Construction Completion Report, summarizing the removal actions and presenting recommendations for NFA, was prepared and submitted for regulator review in July 2011. Regulator comments were received in October and resolved in December 2011. A final Construction Completion Report was submitted in December 2011 and approved in January 2012 (Tetra Tech, 2011). NASA, DEQ and EPA reviewed the post-removal analytical results, contaminant levels and potential risks, and reached a consensus that No Further Action was required for Site 4. This decision was documented in a Concurrence Statement issued with the Final Construction Completion Report (Tetra Tech, 2011). A summary of site findings and proposed actions is presented in Table 4-2.

### 4.1.3 Paint Stain (Site 5)

Site 5 is located on WI immediately adjacent to wetlands and marshes. The Site consists of contamination associated with former painting operations and is collocated with Site 12 (Former Wind Tunnel). Surface and subsurface soil, groundwater, and sediment samples were collected at the site as part of the 1996 SI (Metcalf & Eddy, 1996). The samples were analyzed for TCL organics, TAL metals, and TPH. The analytical results indicated elevated levels of PCBs, SVOCs, and metals in surface soils and sediments.

A RI, under an EPA-approved work plan that combined the investigation with Site 12 activities, was initiated at Site 5 in 2001 (Versar, 2001). The purpose of the RI was to define the nature and extent of contamination and to support a decision regarding the need for and type of further remedial response actions. Additional groundwater, surface and subsurface soil, and sediment samples were collected and analyzed for TCL organics and TAL metals. Surface water and ecological tissue samples were also collected and analyzed. The initial results of the RI indicated that concentrations of Polynuclear Aromatic Hydrocarbons (PAHs) exceeded EPA Region 3 RBCs for industrial receptors, the Site posed an unacceptable risk to human health, and levels of contamination in surface soils and sediments presented a potential risk to ecological receptors. In response to these findings NASA prepared and implemented an EPA-approved removal action work plan to address the immediate human health risks identified at Sites 5 and 12 (FWEC, 2003a). The removal action was implemented in 2003 and post removal samples were collected and presented in a final Removal Action Completion Report approved by EPA (FWEC,

2003). A total of 2,936 tons of soil were removed from the Site 5 and 12 area as part of the removal action.

Concurrent with implementation of the removal action, a work plan for additional RI activities at Sites 5 and 12 was prepared and approved by EPA (FWEC, 2003b). The additional investigations, including the collection and analysis of additional surface and subsurface soil samples, groundwater samples, surface water and sediment samples, and further ecological tissue sampling and analysis and soil and sediment toxicity testing, were initiated in 2003. Subsequent to these activities, it was determined that a former transformer pad located at the Site (Building X-115, see Site 7 discussions) contained PCB concentrations above current TSCA levels and may be a potential source of contamination at Site 5. EPA, DEQ, and NASA reviewed the data and site information and agreed that the former transformer pad should be addressed concurrent with and as part of the Site 5 and 12 RI (NASA 2004d). NASA prepared a work plan for further investigations of the pad and potential migration pathways, and submitted the work plan to EPA and DEQ in February 2005. The work plan was finalized in August 2005 and the additional sampling was completed in the fall of 2005 (Weiss and Associates, 2005). The analytical results and findings from the additional sampling effort, along with historical data, were presented in a draft RI report submitted in July 2006. Regulator review and resolution of comments extended into January 2008. A final RI Report was issued in February 2008 and a revised final RI Report was issued in June 2008, after incorporating revisions requested by the regulators (Weiss and Associates, 2008). The RI report identified metals, PAHs and PCBs in soils at levels that warrant further response actions.

In addition to the RI activities, the Project Team reviewed the current status of Building X-115 and determined that NASA could implement a partial removal at the Site under Toxic Substance Control Act (TSCA) regulations (NASA, 2006a). NASA finalized plans for the TSCA action in July 2007 (TtNUS, 2007e) and conducted, with EPA and DEQ concurrence, a removal of the concrete pad and surrounding soils in October 2007. Post-removal soil samples were collected and the results were incorporated into the FS Report. A draft FS Report, evaluating remedial options to address potential human health and ecological risks associated with impacted soils at the Site, was submitted for EPA and DEQ review in early November 2008. Regulator comments were received in March and resolved in August 2009. The final FS report was issued and approved in September 2009 (TtNUS, 2009a). Based on the FS, NASA, EPA and DEQ identified excavation and offsite disposal as the likely preferred alternative. NASA prepared a draft PRAP proposing this alternative as the preferred remedy and submitted the draft document in September 2009 for EPA and DEQ review. Regulator comments were received in December 2009. Comment responses were submitted in January and all comments were resolved February 2010. The final PRAP was issued March 15, 2010 (TtNUS, 2010d). A public comment period on the proposed remedy was held from March 17 to April 19, 2010. No comments were received during the public comment period.

FY-'20-'21 SMP

A draft ROD was prepared and submitted to the regulators for review on March 8, 2010. Regulator comments were received in May 2010. Regulator comments were discussed and resolved and a Draft Final ROD was issued for final review in early July 2010. Additional regulator comments were received in late July and were resolved in late August 2010. The final version of the ROD was signed by NASA on September 7, 2010 and concurred on by DEQ. However; additional comments from EPA were issued and the ROD underwent a series of editorial revisions from February 2011 through October 2011. A revised Final ROD was signed by NASA on October 28, 2011. DEQ concurred with the ROD on November 2, 2011 and EPA approved and signed the final ROD in December 2011 (NASA, 2011a).

Concurrent to finalizing the ROD, NASA initiated preparation of RD and RA Work Plans. A draft RD Work Plan, including Pre-Design Investigation Sampling and Analysis Plan, was prepared and submitted to the regulators for review December 14, 2011. Regulator comments were received and resolved in February 2012 and the final RD Work Plan was submitted in March 2012 (Tetra Tech, 2012i). The pre-design investigation wetland delineation, sampling and surveys were completed in March and April 2012. A draft Wetland Delineation Report was prepared and submitted to the regulators in May 2012. Comments were received and resolved between June and August 2012. The final Wetland Delineation Report was issued in September 2012 (Tetra Tech, 2012j). The pre-design sampling results were summarized and discussed with the regulators, and were presented in the draft RD/RA Work Plan submitted in September 2012. Regulator comments were received in December 2012 and resolved in January 2013, and the final document was issued in January and approved in February 2013 (Tetra Tech 2013d). Verification/preconstruction soil samples were collected in March 2013, excavation activities began in April 2013, and site restoration was complete in June 2013. A draft RACR was submitted in January 2014. Comments were received and resolved between March and June 2014 and the Final RACR was issued in June 2014 (Tetra Tech, 2014). The EPA approved the final RACR on June 5 and issued a Certificate of Completion stating that the cleanup of Site 5 was completed in accordance with the AAOC and the Performance Standards for the site have been achieved (EPA, 2014a). A summary of site findings and current status are presented in Table 4-3.

### 4.1.4 <u>Transformer Pads (Site 7)</u>

Between 1985 and 1995, NASA implemented a transformer inventory, management, replacement/changeout, and disposal program at WFF. The program consisted of identifying those in-service and out-of-service transformers that were regulated by the TSCA, the replacement and tracking of those units, and the disposal of regulated and non-regulated out-of-service transformers and dielectric fluids. Concurrent with this program, NASA initiated a separate base-wide environmental survey to assess environmental conditions at WFF and to identify areas within the facility where past activities may

potentially present an environmental impact. Former transformer locations where potential spillage may have occurred were designated as Site 7. Site 7 consists of 27 locations where transformers had been removed and/or replaced. Available records and recent inspections indicate that all the transformers have been removed from service and disposed of in accordance with applicable regulations (TtNUS, 2004b).

From 1993 through 1999 NASA conducted sampling and remedial response actions at these sites in compliance with TSCA regulations. In 2004 NASA conducted a review of available records and analytical results for these sites. As a result of this review, NASA determined that inconsistent or inconclusive results existed for two locations, Buildings E-106 and X-115. NASA implemented TSCA corrective action measures at E-106 to ensure that it did not pose a risk to workers and conducted additional sampling at Building X-115 (located within Sites 5 and 12). The results of the sampling at Building X-115 confirmed the presence of PCBs above TSCA criteria. NASA reported the analytical findings to EPA and it was agreed that the PCB contaminated pad at this location would be addressed as part of the CERCLA actions being taken at Sites 5 and 12. NASA summarized the actions taken and the analytical results for the Site 7 locations in a final report and submitted that report to EPA and DEQ in 2004 (TtNUS, 2004b). In addition, NASA prepared and submitted a Decision Document presenting that No Further CERCLA Action is required at the Site 7 locations, other than Building X-115, for EPA review and approval and DEQ review and concurrence. That Decision Document was finalized in January 2005 and NASA, EPA and DEQ signed the final document concurring that No Further Action is required for Site 7 (TtNUS, 2005). A summary of site findings and current status are presented in Table 4-4.

# 4.1.5 Transformer Storage Areas (Site 11)

As part of the transformer replacement/changeout program discussed above under Site 7, NASA temporarily stored transformers at three locations before they were shipped off site for proper disposal. These locations were identified as Site 11 during the 1996 Facility-wide SI (Metcalf & Eddy, 1996). Available records and recent inspections indicate that all the transformers have been removed from these temporary storage locations and disposed of in accordance with applicable regulations (TtNUS, 2004b). From 1993 through 1999 NASA conducted sampling and remedial response actions at these sites in compliance with TSCA regulations. In 2004 NASA conducted a review of available records and analytical results for these sites. NASA summarized the actions taken and the analytical results for the Site 11 locations in a final report and submitted that report to EPA and DEQ in 2004 (TtNUS, 2004b). Based on a review of that report and the analytical results from the completed investigations, EPA and DEQ concurred that no further action under CERCLA was required at the Site 11 locations. This agreement was documented in a No Further Action Decision Document which was signed by NASA, EPA, and DEQ in 2005 (TtNUS, 2005). A summary of site findings and current status are presented in Table 4-5.

FY-'20-'21 SMP

# 4.1.6 Former Wind Tunnel (Site 12)

Site 12 is located adjacent to and overlaps Site 5 (see Section 4.1.3). The contaminants associated with the two sites are similar and the extent of the release and migration of contaminants from the two sites overlap. For these reasons, all investigations and response actions taken for Site 5 also include Site 12. As indicated in Section 4.1.3, a SI and an EPA-approved removal action have been completed at Site 12. A RI and supplemental sampling program, conducted under EPA-approved work plans, were conducted at the Site (FWEC, 2003b; Weiss and Associates, 2005). The final RI Report was published in June 2008 and a Draft FS Report was submitted for EPA and DEQ review in November 2008. The FS Report was finalized and approved in September 2009 (TtNUS, 2009a). Based on the FS, NASA, EPA and DEQ identified excavation and offsite disposal as the likely preferred alternative. NASA prepared a draft PRAP proposing this alternative as the preferred remedy and submitted the draft document in September 2009 for EPA and DEQ review. As detailed in Section 4.1.3, regulator comments were received in December 2009 and the final PRAP was issued on March 15, 2010 (TtNUS, 2010d). No comments on the proposed remedy were received during the public comment period held from March 17 to April 19, 2010. The draft ROD, addressing both Sites 5 and 12, was submitted for regulator review in March 2010. Comments were received in May and comments were discussed and resolved through August. The final ROD was signed by NASA on September 7, 2010 and concurred on by DEQ. However; additional comments from EPA were issued and the ROD underwent a series of editorial revisions from February 2011 through October 2011. A revised Final ROD was signed by NASA on October 28, 2011. DEQ concurred with the ROD on November 2, 2011 and EPA approved and signed the final ROD in December 2011 (NASA, 2011).

Concurrent to finalizing the ROD, NASA initiated preparation of RD and RA Work Plans. A draft RD Work Plan, including Pre-Design Investigation Sampling and Analysis Plan, was prepared and submitted to the regulators for review December 14, 2011. Regulator comments were received and resolved in February 2012 and the final RD Work Plan was submitted in March 2012 (Tetra Tech, 2012i). The pre-design investigation wetland delineation, sampling and surveys were completed in March and April 2012. A draft Wetland Delineation Report was prepared and submitted to the regulators in May 2012. Comments were received and resolved between June and August 2012. The final Wetland Delineation Report was issued in September 2012 (Tetra Tech, 2012j). The pre-design sampling results were summarized and discussed with the regulators, and were presented in the draft RD/RA Work Plan submitted in September 2012. Regulator comments were received in December 2012 and resolved in January 2013, and the final document was issued in January and approved in February 2013 (Tetra Tech 2013d). Verification/preconstruction soil samples were collected in March 2013, excavation activities began in April 2013, and site restoration was complete in June 2013. A draft RACR was submitted in January 2014. Comments were received and resolved between March and June 2014 and the Final RACR was issued in June 2014 (Tetra Tech, 2014). The EPA approved the final RACR on June 5 and issued a Certificate of Completion

stating that the cleanup of Site 12 was completed in accordance with the AAOC and the Performance Standards for the site have been achieved (EPA, 2014a). A summary of site findings and current status are presented in Table 4-6.

### 4.1.7 <u>Waste Oil Dump</u>

The WOD is located on a peninsula-like feature at the north end of Runway 17-35. Historical aerial photographic analysis indicates that the Navy built-up and reworked this area during the construction of the runways and also indicate that the Navy and NASA used the area for disposal (USACE, 2000; EPA, 1996). Available records indicate that waste oils and other flammable liquids were disposed of at the Site (Versar, 2001a).

In 1986, a DEQ inspection identified the presence of petroleum saturated soils at the WOD. In response to this finding, NASA conducted a soil removal action and removed about 180 cubic yards of soils from the Site. A SI was conducted, in phases, at the Site from 1990 through 1992. The SI consisted of soil gas surveys and soil, sediment and groundwater sampling and analysis. Samples were analyzed for TCL organics, TAL metals, and TPH. The SI concluded that there was no evidence that waste remained at the WOD and no further action was recommended (Metcalf & Eddy, 1992).

In 1997, an additional monitoring well was installed at the WOD as part of an investigation being conducted at Site 15 (Debris Pile being addressed under the FUDS Program, see Section 2.0). Analytical results from samples collected from this well revealed the presence of solvent and petroleum-related contamination. NASA conducted a follow-up inspection and a RI at the Site from 1998 through 2000 under an EPA-approved work plan (Versar, 2001a). The RI included a geophysical survey and soil and groundwater sampling and analysis. Samples were analyzed for TCL organics, TAL metals, and TPH. The RI concluded that the Site presented unacceptable risks to potential human exposure to groundwater due to the presence of solvent and petroleum-related contamination (Versar, 2001a). In 2003, EPA and NASA agreed that additional sampling at the WOD Site was warranted and EPA approved a final work plan for a Supplemental RI (TtNUS, 2003c). The RI field work was completed in 2003 and a final RI report was issued in 2004 (TtNUS 2004d). The Supplemental RI quantified the contamination and risks associated with the WOD; however, there were uncertainties associated with the form of chromium detected in groundwater at the Site. NASA conducted a follow-up sampling effort, under an approved letter work plan, to speciate the chromium reported as present in the Site groundwater. The sampling was conducted in 2004 and the results presented in a letter report in November 2004 (NASA, 2004b). Based on the RI and supplemental sampling results, NASA issued a final FS identifying and evaluating remedial alternatives in October 2005 (TtNUS, 2005b). A PRAP proposing an RA consisting of biostimulation was published in February 2007 (TtNUS, 2007). No comments were received from the public during the public comment period and a ROD was finalized and issued in March 2008 (TtNUS, 2008). The selected remedy includes in-situ biological treatment (biostimulation), institutional controls and monitoring. The draft Remedial Design for Land Use Controls and the Pilot Study Work Plan were submitted for regulator review in July 2008. Comments were received in September 2008 and final resolution was reached in October 2008. The final Remedial Design for LUCs was submitted in November 2008 and approved and implemented in December 2008 (TtNUS, 2008d).

The Pilot Study Work Plan was also finalized in November 2008 and approved by EPA and DEQ in early December 2008 (TtNUS, 2008e). The pilot study field work, including the collection of a base-line round of groundwater samples, was conducted in December 2008. The results of the pilot study were presented in a draft RA Work Plan submitted for EPA and DEQ review in March 2009. The pilot study results indicated a positive reaction in Site groundwater and confirmed that the planned biostimulation component of the remedy was appropriate for the Site. Comments on the draft report were received in June and resolved in August 2009. The final RA Work Plan was submitted in September and approved in October 2009 (TtNUS, 2009b). The final work plan details the in-situ biological treatment (biostimulation) component of the remedy but does not define the required long-term monitoring component. A separate Long-Term Monitoring Plan for the WOD Site was prepared and submitted to EPA and DEQ for review in May 2009. Comments on the draft plan were received in August and resolved in October 2009. The Final Long-Term Monitoring Plan was issued and approved in October 2009 (TtNUS, 2009c). The full implementation of the WOD Site remedy was implemented in December 2009 with the in-situ injection of oxygen release compounds as delineated in the ROD. The first round of Post-Injection sampling/monitoring was conducted in March 2010. The Remedial Action Completion Report (RACR), incorporating the results of the March sampling, was submitted to regulators in June 2010. Comments on the RACR were received in December 2010 and responded to in January 2011. Comments were resolved in March 2011 and the final RACR was issued in April 2011 (TtNUS, 2011a).

Ongoing LTM activities were conducted quarterly with sampling events completed in June, September, and December 2010 (LTM Rounds 2, 3, and 4). A Data Report for the LTM Rounds 2 and 3 were submitted in August and December 2010, respectively. The results of the LTM sampling were discussed with the Team during the September 2010 RPM meeting and EPA and DEQ agreed that future quarterly LTM reports should be issued as finals only. Comments on the reports, if issued, will be considered during the preparation of subsequent quarterly reports and will be incorporated into the draft annual report of findings and recommendations. The CY 2010 Annual Report (presenting data from LTM Rounds 1, 2, 3 and 4) was submitted in March 2011. Regulator comments were received in August 2011. Responses to regulator comments were submitted in September and resolved in November 2011. The final CY'10 Annual Monitoring Report was issued November 21, 2011 (TtNUS, 2011d).

Based on the results of the CY 2010 LTM, NASA, EPA and DEQ agreed that the monitoring frequency could be reduced to semi-annual. NASA conducted CY 2011 LTM sampling events in March and September 2011. A data report for the March sampling event was submitted on June 22, 2011. The draft CY 2011 Annual Report, presenting and evaluating the March and September 2011 sampling results, was prepared and submitted for review on December 14, 2011. Regulator comments were received in March 2012. Comment responses were issued in May and, after receiving regulator concurrence, the final CY'11 Annual Report was finalized In July and issued in August 2012 (Tetra Tech, 2012a).

Recommendations from the CY'10 and CY'11 Annual Reports to reduce the number of wells, decrease the analytical parameters and expand the dissolved oxygen monitoring requirements were incorporated into a revision to the LTM Program. The Long-term Monitoring Plan Revision 1 was issued in August 2012 and finalized in September 2012 (Tetra Tech, 2012b). CY 2012 sampling rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra Tech, 2012c). The draft CY 2012 Annual Report, presenting and evaluating the March and September 2012 sampling results, was prepared and submitted for review on December 11, 2012. Regulator comments were received in April 2013. Comment responses were issued in April and resolved in May 2013. The CY'12 Annual Report was finalized in May and approved June 2013 (Tetra Tech, 2013).CY 2013 sampling rounds were conducted in March and September 2013. A data report presenting the results from the March 2013 and resolved in May 2013. The CY'12 Annual Report was finalized in May and approved June 2013 (Tetra Tech, 2013).CY 2013 sampling rounds were conducted in March and September 2013. A data report presenting the results from the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013a). The draft CY'13 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2013. Regulator comments were received January 22, 2014. Comments were resolved in February and the final CY 2013 Annual Report was issued February 12, 2014 (Tetra Tech, 2014a).

Recommendations from the CY 2013 Annual Report to decrease the number of wells were documented in a revised LTM Plan (Long Term Monitoring Plan Rev-2) issued in February 2014 (Tetra Tech, 2014f). CY 2014 sampling rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was prepared in June and issued in July 2014 (Tetra Tech, 2014b). The March 2014 data report documented that cleanup goals had been achieved for all Contaminants of Concern (COC) except arsenic. The Project Team discussed the findings at the June 10, 2014 RPM Meeting. EPA and DEQ concurred with the findings and approved a reduction in the parameters for the September 2014 sampling, and requested the decision be documented in the CY 2014 Annual Report. The CY 2014 Annual Report was submitted in December 2014 and finalized April 21, 2015 (Tetra Tech, 2015). The spring 2015 semi-annual sampling was conducted in March 2015 and the semi-annual data report was issued on May 27, 2015 (Tetra Tech, 2015a). To document the changes made to the monitoring plan through 2014, the Long-Term Monitoring Plan Rev 3 was issued in July and finalized September 21, 2015 (Tetra tech, 2015)). The fall semi-annual monitoring was conducted in September 21, 2015 (Tetra tech, 2015).

2015 and the CY 2015 draft report presenting the results and evaluating the calendar year and long-term trends was submitted in December 2015. Regulator comments were received in February and resolved in April 2016. The final Annual Groundwater Monitoring Report for Year 2015 was issued in April 2016 (Tetra Tech, 2016). No changes were recommended or implemented at the end of the 2015 sampling and the spring 2016 sampling event was conducted in April 2016 and the data report submitted in June 2016 (Tetra Tech, 2016a). The semi-annual sampling continued in April and October 2016; the report was finalized and issued in February 2017 (Tetra Tech, 2017), with the recommendation to reduce the sampling frequency to twice every five years with one sampling event in the spring and one in the fall. The next round of sampling was conducted in October 2017. The report was issued as a draft on February 1, 2018; the EPA and DEQ comments were received on February 22 and 28, 2018, respectively. The final report was issued on March 13, 2018 (NASA, 2018c). The next round of sampling is planned in March 2020.

The AAOC requires that NASA conduct a review of ongoing RAs every five years until EPA issues a Certificate of Completion documenting that cleanup standards have been achieved and the remedy remains protective. The five-year review process was initiated in December 2012. Data review, site inspections, interviews and remedy protectiveness evaluations were conducted through June 2013 when the draft Five-Year Review Report was issued for regulator review and comment. Regulator comments were received in November 2013 and resolved on January 8, 2014. The document was finalized in January and issued in February 2014 (Tetra Tech, 2014g). The review concluded that the WOD remedy was protective and made no recommendations for further evaluation. EPA issued a letter dated March 6, 2014 concurring with the findings (EPA, 2014). A summary of site findings and proposed actions is presented in Table 4-7.

The draft of the 2018 Five-Year Review, the second for this site, was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019 (NASA, 2019a), with EPA concurrence on March 7. The review concluded that the remedy remains protective of human health and the environment. The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019.

# 4.1.8 <u>Scrapyard (N-222)</u>

The Scrapyard Site (N-222) was identified as an AOC during the 1988 PA due to the presence of empty waste drums, scrap metal and electrical components, and visible soil staining (NASA, 1988). Site inspections were conducted at the Site in 1990 and 1992 (Ebasco, 1990; Metcalf & Eddy, 1992). Soil sample analytical results indicated the elevated presence of PCBs in Site soils. An EPA-approved RI work plan was implemented at the Scrapyard in 1995 (Metcalf & Eddy, 1995a). During the RI, field

instrument readings indicated the possible presence of radiological materials at the Site. To further evaluate the findings, NASA prepared and implemented an EPA-approved radiological survey at the Site (Metcalf & Eddy, 1995b). The results of the survey and RI were reported to EPA in a Limited RI report in 1995 (Metcalf & Eddy, 1995). The RI confirmed the presence of PCBs in soils and identified the limited presence of radiological source materials at the Site. Radiological readings confirmed the presence of radioisotope emitting dials and other instrument components at the Site. These instrument components were removed and disposed in accordance with applicable regulations during the performance of the fieldwork. At that time, NASA took the Scrapyard out of service, constructed a fence around the Site, and posted the area to restrict site access. NASA and EPA agreed at that time that further investigations and removal actions were warranted at the Scrapyard.

In 2002, NASA implemented an EPA-approved work plan for further characterizing the PCB and radiological contamination at the Site (Weiss and Associates, 2002). The investigation consisted of collecting soil samples for PCB and radiological analysis. The results were reported to EPA and DEQ in a Data Gaps Report and supported the need for removal actions (Weiss and Associates, 2003). The removal action plans were detailed in EPA-approved work plans and implemented in 2003 after providing the required public notice (FWEC, 2003c; Weiss and Associates, 2003a; NASA, 2003). The removal action consisted of the removal and proper offsite disposal of approximately 4,018 tons of soil and scrap from the Site (FWEC, 2004). Confirmation sampling conducted at the Site after removal actions confirmed that clean-up goals presented in the work plans had been achieved.

After completion of the soils removal actions at the Scrapyard Site, NASA, EPA, and DEQ agreed that groundwater studies were necessary to further evaluate the potential impacts from the Site. A work plan for characterizing and sampling groundwater at the site was finalized in November 2004 (Weiss and Associates, 2004). The groundwater investigations were conducted in 2005 and the final Groundwater Characterization (SSI) report was submitted in December 2005 (Weiss and Associates 2005a). In 2006, NASA conducted a detailed review of past activities at the Scrapyard Site and tabulated the analytical results from completed investigations including pre- and post-removal soil samples and groundwater samples. The results of this assessment, including a risk evaluation, were presented in a Site Summary Status Report finalized in August 2006 (TtNUS, 2006a). NASA, EPA, and DEQ reviewed the findings and reached a consensus that the Scrapyard Site should be considered for a No Further Action decision. A PRAP proposing No Further Action for the Site was published in February 2007 (TtNUS, 2007a). No comments on the proposed remedy were received during the public comment period and EPA, DEQ, and NASA agreed on a No Further Action decision for the Site. This decision was documented in a ROD finalized and issued in January 2008 (TtNUS, 2008b). A summary of site findings and proposed actions is presented in Table 4-8.

FY-'20-'21 SMP

# 4.1.9 Photographic Tank (M-15)

The Photographic Tank used for processing wastewater from a former photographic laboratory was identified as an AOC during the PA (NASA, 1998). The Site was investigated and sampled during a facility-wide SI in 1990 (Ebasco, 1990). The investigation included the collection and analysis of soil, surface water, sediment, and tank contents for TCL organic and TAL metals. The results of this investigation identified that the tank contents did not present a threat. Follow-up investigations to further characterize the Site and to determine if a release had occurred from the tank were conducted in 2000. 2002, and 2003 (Versar, 2000; TtNUS, 2003b). These investigations included the installation and sampling of monitoring wells, investigation of underground structures associated with the tank, and the collection and analysis of soil, surface water, and sediment samples for TCL organic and TAL metals. The results of the investigation identified the presence of several metals at the Site at concentrations above background and ecological screening levels. An evaluation of the analytical results concluded that the Site did not pose an unacceptable risk to human health; however, a risk to the environment could not be ruled out (TtNUS, 2003b). Additional soil, surface water, and sediment sampling and analysis for target metals were performed at the Site in 2003 under an EPA-approved work plan (TtNUS, 2003b). The results of the sampling were presented in a summary and ecological risk evaluation report which recommended that further ecological toxicity testing be performed to determine the need for remedial action (TtNUS 2004e).

A letter work plan detailing the sampling and ecological toxicity testing to be performed at the Photographic Tank Site was finalized in August 2005 (TtNUS, 2005a). The additional studies and toxicological testing was conducted in late 2005 and a report presenting and evaluating the results was submitted in an Ecological Risk Evaluation Report which was finalized in February 2007 (TtNUS, 2007b). Based on the findings of the risk assessment, it was concluded that no action was necessary to protect human health or the environment. A No Action Decision Document closing the Site was signed by EPA, DEQ and NASA in February 2007 (TtNUS, 2007b). A summary of site findings and proposed actions is presented in Table 4-9.

#### 4.1.10 Former Fire Training Area (FFTA)

The FFTA was used by NASA for fire fighting training exercises from 1965 to 1987. In 1986, a DEQ inspection identified the presence of petroleum saturated soils at the FFTA. In response to this finding, NASA conducted a soil removal action, removing about 120 cubic yards of soils from the Site (Metcalf & Eddy, 1996). The Site was identified as an AOC during the performance of the 1988 facility-wide PA (NASA, 1998). A SI was conducted in phases at the Site from 1990 through 1992 and finalized in 1996

(Ebasco, 1990; Metcalf & Eddy, 1992; Metcalf & Eddy, 1996). The SI consisted of the performance of soil gas and geophysical surveys and the collection of soil and groundwater samples for TCL organics, TAL metals, and TPH. The results of the investigation identified the elevated presence of solvent, metals, and petroleum-related contamination in soils and groundwater.

An EPA-approved RI work plan was implemented at the Site in 1993 (Metcalf & Eddy, 1993). The RI included additional soil gas surveys and soil and groundwater sampling and analysis for TCL organics, TAL metals, and TPH. The analytical results confirmed a release to groundwater and identified a threat to human health under a drinking water use scenario (Metcalf & Eddy, 1996a). Further groundwater sampling was conducted in 2000 to more fully characterize the nature and extent of the groundwater contamination associated with the FFTA (Versar, 2000a). Groundwater samples that were analyzed for TCL organic and TAL metals confirmed the presence of a groundwater plume containing solvent and petroleum-related and metals contamination. A Supplemental RI designed to more fully characterize site conditions, investigate possible source areas, further define the nature and extent of the groundwater contamination, and define the nature of the risks posed by the FFTA was conducted, under an EPA-approved work plan, in 2003 (TtNUS, 2003c). The results of the Supplemental RI were reported to EPA and DEQ in a final report in 2004 (TtNUS, 2004c). The Supplemental RI found that the Site did not present a threat to ecological receptors but that groundwater contamination presented an unacceptable risk to human health under the future use scenario.

NASA finalized a FS evaluating potential remedial alternatives for the FFTA Site in September 2005 (TtNUS, 2005c). A PRAP proposing an RA consisting of biostimulation was published in February 2007 (TtNUS, 2007c). No comments were received from the public during the public comment period and a ROD was finalized and issued in December 2007 (TtNUS, 2007f). The selected remedy includes in-situ biological treatment (biostimulation), institutional controls and monitoring. The Draft Pilot Study Work Plan and Remedial Design for Land Use Controls were submitted to EPA and DEQ for review in March 2008. Comments were received in May and responses and proposed revisions were submitted in June 2008. Resolution of comments and responses was reached in October and final documents were submitted in November and approved in December 2008 (TtNUS, 2008f; TtNUS, 2008g).

The LUCs for the FFTA Site were implemented and the pilot study field work was conducted in December 2008. During performance of the pilot study, free product was encountered in two of the FFTA Site source area monitoring wells. In response to this finding, NASA immediately notified EPA and DEQ of this finding and conducted a free product removal (NASA, 2008). In addition, a free product monitoring and removal plan was developed and presented to EPA and DEQ in February 2009. The plan was finalized in April 2009 after receipt and resolution of regulator comments (TtNUS, 2009d). NASA conducted regular free product monitoring in the wells through the close of the period. Significant measurable levels of free

product have not been encountered in the wells since early 2009. The results of the pilot study were presented in a draft Pilot Study Report submitted for EPA and DEQ review in April 2009. Comments on the report were received in June and resolved in July 2009. The final Pilot Study Report was issued in July and approved in August 2009 (TtNUS, 2009e).

The pilot study sampling results indicated that concentrations of target compounds identified as risk drivers in the ROD were relatively low and in most cases too low to be effectively treated with the planned biostimulation injections. This finding was confirmed by the general lack of response seen in the field data collected during the pilot test. Based on the pilot study findings, it was agreed that additional groundwater sampling was required at the Site prior to further implementation of the selected remedy. The sampling program was presented in a Supplemental Groundwater Sampling Plan submitted in June 2009 and approved in July (TtNUS, 2009f). The sampling was conducted in August 2009 and the analytical results were summarized in a Draft Sampling Letter Report in December 2009. Regulator comments were received in February 2010, Responses to Comments and comment resolution occurred in March 2010, and a Final Sampling Report was submitted on April 12, 2010 (TtNUS, 2010f). The Supplemental Groundwater Sampling event indicated that groundwater contamination at the FFTA was decreasing and it was agreed to continue quarterly monitoring while evaluating the need to implement the active remedy components. In order to document this decision and to support immediate implementation, NASA submitted a Quarterly Groundwater Sampling Plan February 4, 2010 (TtNUS, 2010g). The sampling plan was approved by the regulators on March 23, 2010. The 1<sup>st</sup> quarter sampling event was conducted in March 2010, and a Groundwater Sampling Report was submitted in June 2010 (TtNUS, 2010h). A 2<sup>nd</sup> quarter sampling event was conducted in June 2010, and the Groundwater Sampling Report was submitted in August 2010 (TtNUSi). The 3<sup>rd</sup> quarter sampling event was conducted in September 2010, and the Groundwater Sampling Report was submitted in December 2010 (TtNUSp).

Concurrent with implementing the quarterly sampling, NASA prepared the Draft Long Term Monitoring (LTM) Plan to comply with the long-term monitoring component of the selected remedy. The LTM Plan was submitted on April 28, 2010 and regulator comments were received on June 15, 2010. Comments were resolved in July and the Final FFTA LTM Plan was submitted on August 6, 2010, and approved in March 2011 (TtNUS, 2010q). The 4<sup>th</sup> quarterly sampling event was conducted in December 2010. The results were presented in the CY 2010 Annual Report (presenting data from LTM Rounds 1, 2, 3 and 4) submitted in March 2011. Regulator comments were received in August 2011. Responses to regulator comments were submitted in September and resolved in November 2011. The final CY'10 Annual Monitoring Report was issued November 21, 2011 (TtNUS, 2011e).

Based on the results of the first year of quarterly monitoring (CY'10 Annual Report), NASA, EPA and DEQ agreed that further active remediation (injections) were not necessary at the FFTA Site and the

long-term monitoring frequency could be reduced to semi-annual. To document the implementation of the RA components NASA prepared a RACR and submitted the draft for regulator review in May 2011. Regulator comments were received in October 2011. NASA responses to the comments were submitted in November and resolved in December 2011. Approval of the final RACR submitted in December 2011 is waiting EPA approval.

NASA conducted CY 2011 LTM sampling events in March and September 2011. A data report for the March sampling event was submitted on June 22, 2011. The draft CY'11 Annual Report, presenting the March and September results, was prepared and submitted for review on December 14, 2011. Regulator comments were received in May 2012. Comment responses were issued in May and, after receiving regulator concurrence, the final CY'11 Annual Report was finalized in May and issued in June 2012 (Tetra Tech, 2012d).

Recommendations from the CY'10 and CY'11 Annual Reports to reduce the number of wells, decrease the analytical parameters and expand the dissolved oxygen monitoring requirements were incorporated into a revision to the LTM Program. The Long-term Monitoring Plan Revision 1 was issued and finalized in August 2012 (Tetra Tech, 2012e). CY 2012 sampling rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra Tech, 2012f). The CY'12 Annual Report, presenting the results of the September sampling and evaluating the calendar year results prepared and submitted for review on December 13, 2012. Regulator comments were received in April 2012. Comment responses were issued in April and, after receiving regulator concurrence, the final CY'12 Annual Report was finalized in May and issued in June 2013 (Tetra Tech, 2013b). CY 2013 sampling rounds were conducted in March and September 2013. A data report presenting the results from the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013c). The draft CY'13 Annual Report, presenting the results of the September sampling and evaluating the calendar year results from the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013c). The draft CY'13 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued in December 2013. Regulator comments were received January 22, 2014. Comments were resolved in February and the final CY 2013 Annual Report was issued February 12, 2014 (Tetra Tech, 2014a).

Recommendations from the CY 2013 Annual Report to decrease the number of wells were documented in a revised LTM Plan (Long Term Monitoring Plan Rev-2) issued in February 2014 (Tetra Tech, 2014h). CY 2014 sampling rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was prepared in June and issued in July 2014 (Tetra Tech, 2014d). The CY 2014 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was issued December 17, 2014. Regulator comments were received January 30, 2015 and resolved April 7, 2015. The final CY 2014 Annual Report was issued April 21 (Tetra Tech, 2015b). As a result of the CY 2014 findings, it was agreed that the frequency of the monitoring program

should be reduced to every nine months, the field parameters reduced to eliminate nitrate/nitrite, ferrous iron, alkalinity, and hydrogen sulfide, and reporting be reduced to data reports with trend analysis conducted as part of the Five-Year Review reporting. The Team agreed to implement these changes for the spring 2015 sampling event and document the changes in a revised long-term monitoring plan. The spring 2015 semi-annual sampling was conducted in March 2015 and the semi-annual data report was issued on May 27, 2015 (Tetra Tech, 2015k). Revision 3 to the LTM Plan documenting these changes was issued July 27, 2015. Regulator comments were received in August 2015 and the revised LTM Plan (Long Term Monitoring Plan Rev 3) was finalized and issued September 21, 2015 (Tetra Tech, 2015o). The fall 2015, or tenth round monitoring event, was conducted in December 2015 and the data report of findings submitted in February 2016 (Tetra Tech, 2016b).

The eleventh event was completed September 28, 2016 and the Monitoring Data Report was issued January 3, 2017 (Tetra Tech, 2016g). The twelfth round of sampling was completed in June 2017 with the report issued in November 2017 (NASA, 2017).

The AAOC requires that NASA conduct a review of ongoing RAs every five years until EPA issues a Certificate of Completion documenting that cleanup standards have been achieved. The five-year review process was initiated in December 2012. Data review, site inspections, interviews and remedy evaluations were conducted through June 2013 when the draft Five-Year Review Report was issued for regulator review and comment. Regulator comments were received in November 2013 and resolved on January 8, 2014. The document was finalized in January and issued in February 2014 (Tetra Tech, 2014g). The review concluded that groundwater at the FFTA had not been tested for the presence of PFAS, a class of emerging contaminants associated with firefighting foams which may have been used at the FFTA. The Five-Year Review Report recommended that groundwater at the Site be sampled and analyzed for PFAS constituents. It was further recommended that the protectiveness statement for the FFTA remedy be deferred until an evaluation of PFAS contamination is conducted. EPA issued a letter dated March 6, 2014 concurring with the findings and requiring the sampling, analysis and evaluation be completed before December 31, 2018 (EPA, 2014). On August 12, 2016, NASA submitted a draft Work Plan for conducting a PFAS investigation at the FFTA. Regulator comments were received in September 2016. Comments were resolved in October 27, 2016 (NASA, 2016).

In accordance with the recommendations from the 2013 Five-Year Review, a sampling and analysis event for PFAS was conducted in December 2016. The draft data report presenting the analytical findings was submitted in February 2017. DEQ and EPA comments on the draft report were received February 28, 2017 and May 1, 2017, respectively. NASA submitted the final report in June 2017 (Tetra Tech, 2017a). The sampling showed that groundwater throughout the FFTA had PFAS constituents above their

respective EPA Health Advisory (HA) values. Based on these results, additional PFAS sampling throughout the WFF was planned and conducted (Section 4.1.18).

A Periodic Monitoring event (9-month) was completed March 28, 2018 and the Draft Monitoring Data Report was issued June 26, 2018 (NASA, 2018e). EPA approval was received on September 20, 2018. The next round of sampling (Round 14) was completed in December 2018 and the Draft Monitoring Data Report was issued April 24, 2019. Regulator comments were received on May 23 (DEQ) and May 24 (EPA). A revised Data Monitoring Report was submitted on July 30, 2019.Additional comments were received from both the DEQ and EPA on September 4, 2019 and the final Report was submitted on September 30 (NASA, 2019b), with the recommendation to reduce the sampling frequency to once every 15 months. EPA approval of the report was received on November 1, 2019 and DEQ approval was received on November 4, 2019. The next round of sampling is planned in March 2020.

The draft of the 2018 Five-Year Review, the second for this site, was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019 (NASA, 2019a), with EPA concurrence on March 7. A "Protectiveness Deferred" determination was assigned to the FFTA pending the results of the on-going PFAS investigation. The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019.

A summary of site findings and proposed actions is presented in Table 4-10.

### 4.1.11 <u>Pistol/Rifle Range</u>

The pistol/rifle range was constructed by the Navy prior to 1949 (MicroPact Engineering, 2003). NASA periodically used the facility since they acquired the property in 1959. As discussed in Section 2.2, NASA recently completed an ASR of the facility, including the pistol/rifle range. Based on the ASR findings, it has been determined that the Navy also constructed and used a skeet range and machine gun testing facility at the pistol/rifle range (USACE, 2005). No formal environmental investigations have been conducted at the Site. In 2006, NASA confirmed that the range complex was closed and would not be reopened. Also in 2006, NASA conducted a review of the site history and available documents and prepared and submitted a draft work plan for SI activities at the Site. The proposed activities included in the work plan address the pistol, rifle, skeet and machine gun firing ranges and refer to the Site as the Main Base Firing Range Complex. The Work Plan and Quality Assurance Project Plan for the Main Base Firing Range Complex was finalized in May 2007 and approved by EPA and DEQ in August 2007 (TtNUS, 2007d). Field sampling activities were conducted in November 2007 and a draft SI Report was submitted for regulator review in March 2008. Comments on the draft SI were received in June and

responses and proposed revisions were submitted in July 2008. Final resolution of the comments and responses were reached in October 2008 and the final SI Report was submitted for regulator approval in November. Additional editorial comments on the final report were received from DEQ in January 2009 and the revised final SI Report was issued in February 2009 (TtNUS, 2009g). The revised final report was approved by the regulators in March 2009.

The SI findings were discussed with EPA and DEQ during the preparation of the SI report starting in June 2008. At the June Remedial Project Manager meeting, it was tentatively agreed that a Non-Time Critical Removal Action to remove contamination from the pistol range target area, rifle range target area, and skeet range area may be appropriate for the Site, pending approval of the risk assessment findings (NASA, 2008a). The SI report findings were discussed again during the December 2008 Remedial Project manager meeting and it was agreed that a removal action was an appropriate response for the Site (NASA, 2008). After finalization of the SI Report in February 2009, NASA prepared a technical memorandum presenting potential options for developing cleanup goals to be used during the planned removal action. The options were discussed at the March 2009 Remedial Project Manager meeting and presented in a draft technical memorandum in April (NASA, 2009). The technical memorandum and proposed cleanup goals were discussed in a series of teleconferences among NASA, EPA and DEQ from April through June and the final approach to developing the cleanup goals was agreed to during a teleconference held in June 2009 (TtNUS, 2009h). As part of that resolution and as presented in the teleconference summary, NASA agreed to conduct a supplemental soil sampling and analysis event to further characterize the extent of the lead contamination found in drainage area north of the Site. The supplemental sampling and analysis were conducted in July 2009 and the results were presented in the Summary for Supplemental Soil Sampling Main Base Firing Range Complex Report issued in August 2009 (TtNUS, 2009i). Concurrent with these activities NASA initiated a review of historical site use to determine if NASA funds could be used to conduct the removal or if the site should be referred to the FUDS program. As a result of this evaluation, the USACE acknowledged responsibility for the Former Skeet Range as a FUDs site. Further evaluation of historical use and responsibility for the remaining portions of the range complex was under discussion between NASA and the USACE into FY 2014. In FY 2014, NASA agreed to accept responsibility for further investigation and actions related to the former pistol and rifle ranges (Pistol/Rifle Range). NASA conducted a review of historical investigations at the Pistol/Rifle Range and prepared a summary report presenting site data and reevaluating risks at the site. The draft report was submitted August 26, 2014 and EPA and DEQ comments were received in October 2014. Comments were resolved in February 2015 and the final Site Summary and Risk Re-Evaluation was issued March 5, 2015 (Tetra Tech, 2015c).

Based on the completed site investigations, NASA, EPA, and DEQ agreed removal actions are appropriate to address the contamination identified at the Pistol/Rifle Range. It was also agreed that

additional supplemental sampling was required to further define the potential extent of the removal action at specific firing points. NASA submitted a letter work plan for sampling at the former rifle and aircraft gun testing firing points in March 2015. Regulator comments were received and resolved in May and the final plan was issued May 15, 2015 (Tetra Tech, 2015d). Supplemental sampling was conducted in June 2015 and the results presented in a Data Summary Report dated July 27, 2015 (NASA, 2015a). The report was accepted as final with no comments. Concurrent to the sampling, NASA initiated preparation of an EE/CA for a NTCRA at the Pistol/Rifle Range. The draft EE/CA was submitted June 16, 2015. Regulator comments received in August were resolved in December and the final document issued December 8, 2015 (Tetra Tech, 2015m). A public notice regarding the removal action was published and no comments were received during the comment period from January 13, 2016 to February 15, 2016. An AM describing and authorizing the removal action was signed in March and issued in April 2016 (NASA, 2016). A draft RAWP detailing the planned action was submitted for regulator review in January 2016. Comments were received in April and resolved in May 2016. The final RAWP was issued May 24, 2016 (Tetra Tech, 2016e). The soil removal action to remove contamination from the pistol range target area and rifle range target area was conducted from May through August 2016, and the draft Construction Completion report was submitted for review on November 10, 2016. The Construction Completion Report was finalized in March 2017 (Tetra Tech, 2017b) and NASA, EPA, and DEQ signed a NFA Consensus Statement on March 21, 2017.

Table 4-11 presents the current status of the Skeet Range. See Section 7.1.7 for activities conducted under the FUDS MOA at the Skeet Range.

#### 4.1.12 South End Disposal Area (SEDA)

The SEDA consisted of an elevated berm oriented perpendicular to the Atlantic Ocean shore line at the southern end of Wallops Island. The berm was approximately 50 feet long and up to 20 feet wide and appeared to contain soil, sand, concrete and metal debris. The SEDA was identified as an AOC in late 2009 after a series of severe storms caused significant beach erosion and the presence of military munitions were discovered at the base of the southern berm. NASA secured the area and an Air Force Explosive Ordnance Disposal (EOD) unit from Dover Air Force Base responded and treated the munitions on site. The EOD unit identified the munitions as 3.5-inch M28 and M29 Rockets. Because of their unknown source and the possible presence of additional munitions, NASA installed and maintained temporary fencing along the southern end of the island and restricted access to the area of concern. In addition, NASA trained security personnel conducted visual inspections of the area after subsequent storms to coordinate additional response actions, as necessary.

Between November 2009 and March 2010, twenty-one 1950s-era rocket propelled grenades (RPGs) and NASA-related spin motors and rocket debris were identified by NASA and treated by the Dover Air Force Base EOD team. The EOD team stated in March that further response actions would not be provided because the RPGs and other MEC appeared to be a site rather than indiscriminant MEC washing ashore from the ocean. In response to the reoccurrence of the MEC and the unknown source, NASA conducted a preliminary Principle Responsible Party Analysis and determined that NASA may have used the area in the vicinity of the SEDA for burning of excess rockets from the late 1960s to the 1980s, and that NASA may have buried the RPGs at the SEDA sometime in the early 1980s when the RPGs were found in a former Navy building being demolished.

In May 2010, NASA, EPA and DEQ reviewed the SEDA findings and it was agreed that NASA would address potential safety hazards by conducting a limited response action to remove and treat remaining MEC items (NASA, 2010). A work plan documenting the Early Action was prepared and submitted to the regulators for informational purposes in September 2010 (TtNUS, 2010k)). The removal action, consisting of excavating the berm and shallow soils and the inspection/survey, removal and treatment of MEC was conducted in October and November 2010. Sixteen additional RPGs and two NASA spin motors were recovered and treated during the early action. A report summarizing the early action was submitted and finalized in February 2011 (TtNUS, 2011b).

Concurrent with these response actions, NASA initiated the preparation of a Preliminary Assessment. The assessment included the review of historical records and aerial photographs, and conducting a series of interviews with current and former NASA employees. The draft Preliminary Assessment report was submitted for regulator review in May 2011. Regulator comments were received in late September and responded to in November 2011. Comment resolution was reached in September 2012 and the final Preliminary Assessment Report was issued on September 28, 2012 (Tetra Tech, 2012g). Based on the findings presented in the preliminary assessment, NASA agreed to conduct a focused sampling study to complete the site screening process. A draft Sampling and Analyses plan was submitted in July 2012. Regulator comments were received and resolved in August and September 2012 and the final Sampling and Analysis Plan was issued on September 11, 2012 (Tetra Tech, 2012h). Regulator approval of the plan was received in October and field activities were conducted in November 2012. A draft Site Screening Report was issued in April 2013. Regulator comments were received in June 2013, responded to in August 2013, and resolved in January 2014. The final report, recommending NFA for SEDA, was issued in February 2014 (Tetra Tech, 2014e). EPA and DEQ signed the NFA Concurrence Statement in February and March 2014, respectively. A summary of site findings and planned actions is presented in Table 4-12.

#### 4.1.13 Area of Interest – 20 Transformer (AI-20)

Al-20 is a pole-mounted transformer located at the north end of Wallops Island, see Figure 2-11. The northern portion of Wallops Island is largely undeveloped, with a few roads, and is dominated by wetlands, marshes, and maritime forests, and open brush lands. Al-20 is located in a remote area of the Island and consists of a transformer pole with a dangling transformer attached to the pole. The area is densely vegetated. The remains of a lookout tower and a small building are located east of the transformer pole. Wetlands have been delineated to the north and south of Al-20. The site is bounded to the east by a sand dune (approximately 10 feet high) that serves as a barrier to the Atlantic Ocean and to the west by a maritime forest that leads to the Chincoteague Sound. Access to the site currently is limited to a walking trail along the sand dune.

Al-20 was identified during a PA conducted by USACE under the FUDS Program. The PA consisted of a review of aerial photo analysis, site reconnaissance and employee interviews. The pole-mounted transformer at Al-20 is an abandoned remnant of power supply structures installed by the Navy in the 1950s. The Al-20 transformer likely contains/contained PCBs, because they were used as coolants and lubricants in transformers from 1929 until 1977. A SI at Al-20 was conducted by USACE in 2012. Three surface soil samples were collected around the pole-mounted transformer and were composited into one sample to determine the presence of PCBs. The USACE reported that PCBs were detected in the soil at 20,000,000 micrograms per kilogram ( $\mu$ g/kg) in the primary sample and 51,000,000  $\mu$ g/kg in the duplicate sample. The exact sample locations and the raw laboratory analytical results from the initial investigation are not available. In 2013, NASA, DEQ and EPA conducted a joint site reconnaissance of Al-20 and the transformer was found dangling from the pole and was suspected to be damaged.

In 2014, NASA decided to take responsibility for follow-up investigations at AI-20. NASA discussed possible response actions with EPA and DEQ and initiated a site screening investigation to confirm the presence of PCBs and provide data to plan further response actions. The draft Site Screening Work Plan was submitted in August 2014. Comments were received and resolved in September and the final Work Plan was issued September 30, 2014 (Tetra Tech, 2014j). The start of field work was delayed by launch activities on Wallops Island and sampling was completed in from November 10 through December 4, 2014. Analytical results and site findings were presented in a draft Characterization Report submitted February 20, 2015. Regulator comments were received and responded to in April 2015. Comments were resolved and the final report was issued May 15, 2015 (Tetra Tech, 2015e). Based on the site findings it was agreed that NASA would conduct a TCRA to address releases at the site. NASA submitted a draft Action Memorandum for regulator concurrence on March 10, 2015. Regulator comments were received March 30 and resolved in late April. NASA finalized and issued the Action Memorandum on June 29, 2015 (NASA, 2015b). Concurrent to preparation of the Action Memorandum, a draft RAWP was prepared

and submitted to the regulators for review on April 9, 2015. EPA and DEQ comments were received May 19, 2015 and responded to and resolved in June 2015. The final RAWP was issued July 24, 2015 (Tetra Tech, 2015f). A public notice announcing the removal action was published in the local newspapers July 29 and 30, 2015. Removal actions commenced August 3, 2015 and field activities were completed on August 31, 2015. The Removal Action Completion Report presenting the post removal sampling results and summarizing removal activities was submitted in December 2015. Comments were received in March and resolved in June 2016. The final report was prepared in July and A No Further Action Concurrence Statement was signed by EPA, DEQ and NASA in September 2016 (NASA, 2016a). A summary of site findings and planned actions is presented in Table 4-13.

#### 4.1.14 North Island Transformers

The North Island Transformers Site includes 17 former electrical poles/transformers that are located in the northern portion of Wallops Island, see Figure 2-11. The northern portion of Wallops Island is largely undeveloped, with a few roads, and is dominated by wetlands, marshes, and maritime forests, and open brush lands. NASA site reconnaissance located some of these transformers and found a variety of site conditions including the presence of a pole stub only, transformer remnants on the ground, or transformers that are still attached to the pole.

The pole locations were identified on historical facility drawings during the USACE initial assessment of AI-20. The investigation of AI-20 prompted additional review of aerial photos and site reconnaissance by NASA to determine if other transformers remained on the island. The analysis identified 17 additional former transformer locations. Further investigation of these sites was delayed into 2014, while responsibility for conducting further assessment of the 17 locations was discussed with the USACE.

In 2014, NASA decided to take responsibility for follow-up investigations of North Island Transformers (NIT). NASA discussed possible response actions with EPA and DEQ and initiated a site screening investigation to determine if transformers and/or PCB contamination exists at the 17 locations. The Site Screening Work Plan was submitted in August 2014. Comments were received and resolved in September and the final Work Plan was issued October 15, 2014 (Tetra Tech, 2014j). The start of field work was delayed by launch activities on Wallops Island and sampling completed December 5, 2014. A draft Site Screening report was submitted February 24, 2015. EPA and DEQ comments were received March 30, 2015 and responded to on May 22, 2015. Comment resolution extended to August 4, 2015 and the final report was issued August 10, 2015 (Tetra Tech, 2015g). Based on the results of the site screening, NASA, EPA and DEQ agreed that No Further Action was necessary for former transformer locations NIT-9, -10, -11, and -15, additional screening was warranted at NIT-2, -3, -4, -5, -6, -8, -12, -13, and -16, and action was required at NIT-1, -7, -14, and -17. NASA agreed to conduct further

characterization at NIT-1 and NIT-17 to support a decision to conduct a TCRA. A draft Site Characterization Work Plan was submitted on March 13, 2015. Regulator comments were received in late March, responded to in April, and resolved in May 2015. The final work plan was issued June 16, 2015 (Tetra Tech, 2015h). The field work and sampling were conducted in July 2015. The draft report of findings was submitted to EPA and DEQ on October 26, 2015 and finalized in January 2016 (Tetra Tech, 2016c). The findings confirmed that a TCRA was an appropriate action for NIT-1, NIT-7, NIT-14 and NIT-17. An AM documenting the need for and authorizing the action was finalized and signed in January 2016 (NASA, 2016b). A draft RAWP detailing the planned action was submitted to EPA and DEQ for review in December 2015. Comments were received and resolved in January 2016. The final RAWP was issued in February and a public notice announcing the removal action was published in March 2016. The TCRA was implemented from March through April 2016 and a draft Construction Completion Report documenting the action was submitted for review in August 2016. Comments were received in October 2016 and resolved in November 2016. The final report was submitted in December 2016 (Tetra Tech, 2016h). On March 21, 2017, NASA, EPA, and DEQ signed a NFA Consensus Statement for NITs-1, -7, -14, and -17.

A letter work plan for conducting additional site screening at the remaining NIT locations was prepared and submitted to the regulators on June 25, 2015. EPA and DEQ comments were received on July 24 and the final work plan was issued July 29, 2015 (Tetra Tech, 2015i). Field sampling was conducted in September and a Technical Memorandum presenting the findings was finalized and issued in February 2016 (NASA, 2016c). The findings confirmed that no additional action was required at the remaining transformer locations. A Consensus Document summarizing the actions taken at the 13 transformer locations not addressed by removal actions, was prepared and submitted in March 2016. Comments were received by June 2016 and resolved in July 2016. The final document containing a No Further Action Concurrence Statement was signed by EPA, DEQ and NASA in September 2016 (NASA, 2016d). A summary of site findings and planned actions is presented in Table 4-14.

### 4.1.15 Structures F-10A/F-10B (Paint Locker and Battery Shop)

Structures F-10/F-10B are located in the western portion of the industrialized area of Main Base. The buildings were identified as a Site in FY 2016. The two buildings were constructed and used during the Navy tenure at WFF and have been used by NASA since 1960. Building F-10A has been used for temporary storage of drums containing oils, solvent and lubricants while building F-10B has been used to store batteries and has housed a metal cutting and shop paint shop. A work plan for conducting an SI at F-10A/F-10B was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA

were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments is ongoing. A summary of site findings and planned actions is presented in Table 4-15.

#### 4.1.16 Building N-166 (Alcohol Storage Building)

Building N-166 is a one-story cinder block storage shed located in the southeastern portion of the industrialized area of Main Base. Building N-166 was built during the Navy operations and used at that time for alcohol storage and for packaging explosives. The building has been used by NASA for storage of building components and office supplies and records. Samples of nearby soils and groundwater were collected and analyzed for VOCs, metals and PCB as part of other ongoing USACE investigations. The analytical results indicated that chemicals were not detected or if present were below background and/or below health-based screening levels. Samples have not been analyzed for explosive constituents. A work plan for conducting an SI at N-166 was finalized in December 2016 (Tetra Tech, 2016) and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments is ongoing. Based on these comments, EPA and DEQ are expected to approve NFA for this site. A summary of site findings and planned actions is presented in Table 4-16.

### 4.1.17 Former Circular Area (FCA)

The FCA is an area that was originally noted as a potential disturbed area on historical aerial photographs and is south of the Boat Basin, see Figure 2-5. The area was initially investigated under the ongoing USACE Project 7 RI. Geophysical surveys conducted within the FCA suggested the presence of buried materials and metals. Test pit excavations of the most prominent anomalies within the FCA uncovered construction, road, and building debris. As Project 7 concentrates on munitions related investigations the area was eliminated from further study under Project 7. NASA accepted the primary role of conducting further screening investigations of the FCA during FY 2016. A work plan for conducting an SI at the FCA was finalized in December 2016 (Tetra Tech, 2016h) and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments is ongoing. A summary of site findings and planned actions is presented in Table 4-17.

FY-'20-'21 SMP

#### 4.1.18 PFAS Sampling

In response to detecting the presence of PFAS compounds in the FFTA groundwater, NASA initiated a drinking water sampling program. On April 7, 2017, NASA submitted a draft work plan for sampling and analyzing NASA and the TOC water supplies and select monitoring wells for PFAS. To supplement this planned sampling, NASA prepared and submitted a work plan Addendum to advance soil borings and collect groundwater grab samples at the western boundary of the facility. EPA and DEQ had no comments on the draft Work Plan. DEQ had no comments on the Addendum and EPA comments on the Addendum were received April 10, 2017. Response to comments and the final Addendum were issued April 19, 2017. EPA and DEQ concurred with the Addendum and the final Addendum was approved on April 19. 2017. NASA conducted sampling in April and May 2017. NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies and has established a working group of stakeholders to ensure a consensus on ongoing actions. A draft report of these activities was submitted in July 2017 with the final report submitted in October 2017 (Tetra Tech, 2017c) and approved by the regulators that same month. NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies to ensure a consensus on ongoing actions and has established a working group of stakeholders to ensure a consensus on ongoing actions with the TOC, EPA, DEQ and other local, state, and federal agencies with the TOC, EPA, DEQ and other local, state, and regulators that same month. NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies on the TOC, EPA, DEQ and other local, state, and federal agencies and has established to ensure a consensus on ongoing actions.

The water supply sampling and analysis program (including WFF wells, TOC wells, and Trails End Campground wells) continues and is adjusted and directed, with input from the stakeholders listed above, as analytical results become available. A Public Information Session to discuss the sampling and results was held on June 14, 2017 at the WFF Visitor's Center. Sampling since the last SMP (December 2018) has included monthly (bi-monthly during the summer months) sampling of the WFF drinking water wells and WFF finished drinking water and the Town of Chincoteague drinking water wells and finished drinking water and the Town of Chincoteague drinking water wells and is adjusted and directed as analytical results become available. To this point, no finished drinking water samples have contained PFAS above the EPA HA. Public Information Sessions to discuss the sampling and results were held on December 19, 2018 and April 2, 2019 at the WFF Visitor Center. NASA also maintains and regularly updates an Information Sheet titles "Environmental Testing at Wallops" on the NASA Wallops.

A Draft Data Report for PFAS perimeter monitoring and observation well installation and sampling was submitted on March 15, 2018. A Draft Data Report for PFAS perimeter monitoring and observation well installation and sampling was submitted on March 15, 2018. EPA comments were received on August 15, 2018; on August 8, 2018, DEQ accepted the report with no comments. Responses to the EPA comments were submitted on November 28, 2018. The EPA accepted the responses on January 31, 2019 and the

Final report was submitted on February 8, 2019 (NASA, 2019c). Following installation, quarterly sampling of these wells has continued. A draft annual report, covering the sampling through June 2018, was submitted on February 6, 2019. DEQ comments were received on February 27, 2019 and EPA comments were received on March 28, 2019. NASA submitted responses to comments on September 11, 2019; EPA and DEQ approved the responses on September 12, 2019 and September 16, 2019, respectively. The final annual report was submitted on September 27, 2019 (NASA, 2019d). DEQ final approval was received on November 4, 2019. EPA final approval was received on December 20, 2019.

NASA also submitted a Draft Preliminary Assessment and Site Investigation (SI) Work Plan for PFAS at WFF on May 24, 2018. DEQ indicated on June 19, 2018 that it did not have comments. EPA comments were received on July 12, 2018. The revised document with responses to comments was submitted on November 1, 2018. EPA and DEQ comments on the document were received on February 20 and 21, 2019, respectively. EPA concurred verbally to the responses on March 5, 2019 and approved finalization of the report and with NASA starting field activities. The final Work Plan was submitted on March 29, 2019 (NASA, 2019e). DEQ approval was received on April 8, 2019. EPA final approval was provided on December 20, 2019. Field work was completed from April through September 2019. The results through the initial sampling were discussed in a meeting with EPA, DEQ, and other stakeholders on July 10, 2019 and additional sampling was agreed upon. At the September 2019 RPM Meeting, it was agreed that additional surface water sampling would take place quarterly for a period of one year; the first round of this sampling occurred in October 2019.

A summary of site findings and planned actions is presented in Table 4-18.

## 4.2 SITE GROUPINGS

A review of the information presented above indicates that grouping several sites with similar contaminants, sources, and/or locations may result in increased efficiencies in conducting response actions. NASA has already identified that response actions at Sites 5 and 12, due to similar contaminants and site locations, should be conducted simultaneously. In addition, the concrete pad that was located at Building X-115 was considered a potential source area located within the Site 5/12 area, and the final remedy for the pad and associated soils was included in the response actions. This grouping of sites will continue to ensure that response actions taken for any one of these sites is consistent with the actions taken for the other sites.

Grouping of the required investigations, response actions, and reporting for Sites 7 and 11 would result in efficiencies as these sites have similar histories and are both related to the electrical transformer management program implemented by NASA at WFF. The transformers removed from Site 7 locations

were temporarily stored at the Site 11 locations. NASA has compiled transformer testing and tracking information that pertains to both sites and has presented those data in a single report. Further evaluation of the sites together would result in efficiencies that would benefit the performance of activities under this SMP.

The remaining sites do not have similar contaminants or are not located in close proximity to each other. The program would not be benefited by combining any other sites.

# 5.0 SCHEDULE

The AAOC requires that this SMP provide a schedule of activities to be completed over the next two Federal Fiscal Years (October 1 through September 30) and that those schedules be updated on an annual basis. The AAOC also defines specific time-frames (durations) for the preparation and submittal of specific deliverables to be produced as part of the Work to Be Performed (U.S. EPA Docket Number: RCRA-03-2004-0201TH). This section discusses the AAOC specified requirements and general schedule assumptions, presents schedules for the SMP Sites identified in Section 4.0, discusses how these schedules were developed and how schedules are to be revised, and addresses the requirement for preparing updates to this SMP.

## 5.1 SCHEDULE DEVELOPMENT

#### 5.1.1 Durations Specified in AAOC

The AAOC dictates specific durations for the preparation of Early Action (EA) work plans and for responding to EPA comments on report submissions. The durations required for these activities/deliverables are discussed below.

#### Early Action Work Plans

The duration for preparing work plans for EAs is specified in Section VI.B of the AAOC. In general, two different durations, depending on how the need for the EA is identified, are specified in the AAOC. If NASA or EPA identify the need for an EA based on the review of this SMP, an EA work plan is to be prepared and submitted within 45 days of EPA approval or concurrence that an EA is appropriate (U.S. EPA Docket Number: RCRA-03-2004-0201TH). As presented in Sections 2.0 and 4.0 of this SMP, NASA has completed EPA-approved removal actions at several sites at WFF. These same sections also present a review of current site conditions and planned activities. Based on the current site conditions, NASA does not propose to conduct any EAs at this time.

If EPA notifies NASA that an EA is warranted due to a new release at WFF, or if EPA and NASA concur that an EA is an appropriate response action for a site condition not identified through a review of the SMP, the work plan for the EA is to be prepared and submitted within 30 days (U.S. EPA Docket Number: RCRA-03-2004-0201TH).

## Response to EPA Comments and Finalizing Report Submissions

Section VI.H.2 of the AAOC specifies the time frame for responding to EPA comments on documents and for submitting revised and/or final documents (U.S. EPA Docket Number: RCRA-03-2004-0201TH). The duration for responding to comments on EA work plans is different from that required for all other documents. Response to EPA comments on an EA work plan are due, along with a revised submittal, within 15 days of receipt of the comments. Responses and a revised submittal for all other documents are due within 45 days of receipt of EPA comments.

In accordance with Section XXIII of the AAOC, the EPA and NASA Project Coordinators have agreed to modify this scheduling requirement to reduce the potential number of submittals. The Project Coordinators have agreed that response to comments and proposed revisions to a submittal should be submitted for review, discussion, and/or approval prior to the preparation of a revised submittal. The response to comment document is to be submitted in accordance with the time frames designated in the AAOC but the revised submittal will not be prepared and submitted for approval until resolution of all comments has been reached and documented. For planning and scheduling purposes, it has been agreed that revised/final submittals are due 30 calendar days after resolution of comments.

A report is not considered final until EPA issues an approval of the revised submittal. If EPA issues a notification that the revised submittal is deficient and issues a disapproval, a revised submittal conforming to the EPA requirements is due within 30 days of receipt of the notification (U.S. EPA Docket Number: RCRA-03-2004-0201TH).

# 5.1.2 <u>General Assumptions and Other Durations Used in Developing Project Schedules</u>

In order to develop site-specific schedules that extend over a two-Fiscal Year period the EPA and NASA Project Coordinators have agreed to adopt other general assumptions regarding the duration for the performance of activities and the preparation of other deliverables. The major assumptions that are to be used in developing site-specific schedules are discussed below.

#### EPA Review Periods

A duration of 60 calendar days for EPA and DEQ review of initial project deliverables is to be used in developing the schedules.

## Comment Resolution

It should be assumed that comment resolution will be reached 30 calendar days after submittal of response to comments (see Section 5.1.1).

## EPA Approval Periods

A duration of 30 calendar days for receipt of EPA approval and DEQ concurrence after submission of a revised deliverable should be used in developing the schedules.

## Initiation and Performance of Field Work

It should be assumed that field work would commence 30 calendar days after receipt of EPA approval of a work plan. Site-specific information, when available, should be used to develop field schedules. When site-specific information is not available it should be assumed that Site Screening Process (SSP) field activities will require 21 calendar days for completion and RI field activities will require 42 calendar days to complete. Other field activities should be developed based on site-specific information or assumptions.

## Submission of Draft Reports Resulting from Field Activities

It should be assumed that reports generated from a SSP activity will be submitted 120 days after completion of field work. One hundred eighty calendar days should be assumed for the preparation of a draft RI report.

# Submission of FS and Decision-Related Documents

It should be assumed that a draft FS will be submitted 150 calendar days after approval of the final RI report. The schedule duration for the preparation and submittal of the draft PRAP should be assumed to be 60 calendar days after receipt of EPA approval of the final FS. Similarly, the submittal date for the submission of a draft ROD is assumed to be 60 calendar days after the close of the public comment period.

#### Remedial Design-Related Documents

A period of 90 calendar days from the issuance of the final ROD was assumed for the preparation and submittal of a RD work plan. It should be assumed that the draft design document will be submitted 180 calendar days after approval of the final RD work plan.

FY-'20-'21 SMP

#### Remedial Action-Related Documents

It should be assumed that a RA work plan will be submitted within 120 calendar days after approval of the final design. The duration required to implement and/or construct remedies can vary widely according to the media being addressed and the type of remedy selected. Because of the potential for this wide variation no general assumptions regarding durations for the implementation of RAs or reporting have been made.

## 5.2 SITE-SPECIFIC SCHEDULES

Project schedules, highlighting work completed over the last year and anticipating work to be performed over the next two Fiscal Years, are presented in Tables 5-1 through 5-17. Site-specific information or the assumptions discussed in Section 5.1 were used to develop the anticipated schedules. Dates have been provided where possible; however, the performance of many of the SMP milestones is contingent on the completion and approval of activities in sequence. Therefore, the schedules present durations and timeframes for those milestones that are contingent on the completion of feeder or precursor activities. In addition, where the outcome of ongoing or planned investigations is not known it was assumed that the site would continue to proceed to subsequent stages of the Regulatory Process Activities presented in Section 3.0 of this SMP. The 2019 and 2020 Fiscal Year schedule for each SMP Site is discussed separately below.

## 5.2.1 <u>Maintenance Facility (Site 2)</u>

Table 5-1 presents completed activities for Site 2. As discussed in Section 4.1.1 an Expanded or Supplemental Site Inspection (SSI) for this site was completed in 2005 and the final report issued in 2006 (TtNUS, 2006). EPA and DEQ approved the report in August 2006 and issued a Consensus Statement with the final report documenting a No Further Action decision for Site 2. Table 5-1 reflects the completion of all planned activities for this Site.

#### 5.2.2 Island Debris Pile (Site 4)

As discussed in Section 4.1.2 the Project Team reached a consensus on initially conducting a BMP operation at Site 4 in order to clear away existing refuse and debris to allow for the planning and completion of a SI. The BMP Work Plan was finalized in September 2006 (URS, 2006). Waste characterization was completed in October 2006 and the debris was cleared from the Site in February 2007. The results of the BMP activities were presented as an appendix in a draft SI Work Plan submitted in June 2007. EPA approved the Work Plan with no comments in October 2007 but a revised Quality

Assurance Project Plan (QAPP) was prepared in response to DEQ comments. The final Work Plan and QAPP were submitted in January 2008 and approved in March 2008 (TtNUS, 2008). The SI field activities were conducted in April and July 2008 and the draft report was submitted December 2008. The final SI Report was issued and approved in April 2009 (TtNUS, 2009). Upon finalization of the SI, NASA prepared and submitted a Technical Memorandum summarizing the SI report findings and proposing removal action cleanup goals in August 2009 (TtNUS, 2009j). A Draft EE/CA for a Non-Time Critical Removal Action was submitted for regulator review in October 2009. Regulator comments were received and resolved, and the Final EE/CA was issued in February 2010 (TtNUS, 2010a). EPA approval of the Final EE/CA was received in March 2010. The Final Action Memorandum documenting the selected remedy presented in the Final EE/CA was signed in April 2010 (TtNUS, 2010b). A Draft RAWP was prepared and submitted for regulator review in March 2010. Regulator comments were received and resolved and a Final RAWP was issued in July 2010 (TtNUS, 2010c). EPA approval of the RAWP was received in November 2010 and the removal action was conducted in the late winter and early spring 2011. A draft Construction Completion Report, including a consensus statement supporting a NFA decision, was submitted in August 2011. Regulator comments were received in October 2011. NASA responses were submitted November and resolved in December 2011. The final Construction Completion Report and No Further Action Concurrence Statement for Site 4 was finalized in December 2011 and signed and issued in January 2012 (Tetra Tech, 2011). Table 5-2 reflects the completion of all planned activities for this Site.

#### 5.2.3 Paint Stain and Former Wind Tunnel (Sites 5 and 12)

As presented in Section 4.2, Sites 5 and 12 have similar contaminants and are located adjacent to each other and potentially impact the same receptors. Response actions at these two sites have been combined into a single action. In addition, Building X-115 is located within the footprint of Sites 5 and 12 and final remediation addresses this possible source area. Table 5-3 presents the fiscal year accomplishments and the schedule of deliverables associated with Sites 5 and 12 over the next two Fiscal Years. Comments on the draft RI report submitted in July 2006 were resolved in January 2008 and a final RI Report was issued in February 2008. However, minor editorial revisions were required and a revised final was submitted in June 2008 (Weiss and Associates, 2008). Preparation of the FS was initiated using the February and April 2008 RI Report documents and a technical memorandum presenting the initial remedial alternative development process was presented to the Project Team in August 2008. The draft FS was submitted early November 2008 and finalized and approved in September 2009. A Draft PRAP presenting the preferred RA was also prepared and submitted for regulator review in September 2009 and finalized in March 2010 (TtNUS, 2010d). A public comment period was held from mid-March through mid-April. The draft ROD was submitted in March 2010 and comments were resolved in August. As shown in Table 5-3, the final version the ROD underwent several

revisions from September 2010 to October 2011. The final ROD was signed by NASA on October 28, 2011, concurred on by DEQ on November 2, 2011 and EPA approved and signed the final ROD in December 2011 (NASA, 2011a).

A draft RD Work Plan, including Pre-Design Investigation Sampling and Analysis Plan, was prepared and submitted to the regulators for review December 14, 2011. Regulator comments were received and resolved in February 2012 and the final RD Work Plan was submitted in March 2012 (Tetra Tech, 2012i). A draft Wetland Delineation Report was prepared and submitted to the regulators in May 2012. Comments were received and resolved between June and August 2012. The final Wetland Delineation Report was issued in September 2012 (Tetra Tech, 2012j). The draft RD/RA Work Plan was submitted in September 2012. Comments were received December 13, 2012 and resolved by January 8, 2013. The RD/RA Work Plan was finalized in January and issued in February 2013 (Tetra Tech 2013d). Sampling and excavation activities began in April 2013, and site restoration was complete in June 2013. A draft RACR was submitted in January 2014 and finalized in June 2014 (Tetra Tech, 2014). EPA issued a Certificate of Completion for Sites 5 and 12 on June 5, 2014 (EPA, 2014a). Table 5-3 reflects the completion of all planned activities for this Site.

#### 5.2.4 <u>Transformer Pads and Storage Areas (Sites 7 and 11)</u>

Sites 7 and 11 have been combined and have been addressed under one action. As discussed in Section 4.2, the transformers removed from Site 7 were temporarily stored at locations designated as Site 11 and these site areas have been investigated and managed under one transformer management program. These two sites have been investigated and historical and current data and information was provided in a series of documents including a draft Decision Document. EPA and DEQ comments on the draft document were resolved and the No Further Action Decision Document was signed in 2005. Table 5-4 reflects the completion of all scheduled activities for these Sites.

## 5.2.5 Waste Oil Dump (WOD)

Table 5-5 presents the accomplishments through 2016 and schedule of deliverables for the WOD over the next two Fiscal Years. As discussed in Section 4.1.7 the final PRAP was published in FY 07. A public meeting was held in March 2007 and the draft ROD was submitted in September 2007. Regulator comments were received in November 2007 and resolved in January 2008. The final ROD was approved in April 2008. Draft Pilot Study Work Plan and LUC Design documents were submitted for regulator review in July 2008. Comments were received in September, resolved in October, and the final plans were submitted November 3, 2008. The Pilot Study field work was conducted in December 2008 and the results presented in a Remedial Action Work Plan in March 2009. The plan was finalized in September

2009. The other component of the selected remedy, Long-Term Monitoring, was addressed in a separate document. The draft Long-Term Monitoring Plan was submitted in May 2009 and finalized in October 2009. RA field work was conducted in December 2009, with the first quarterly sampling event occurring March 2010 constituting the completion of remedial activities. Quarterly monitoring was conducted throughout 2010 and the CY'10 Annual Report was submitted in March 2011 and finalized in November 2011. The draft RACR was submitted in June 2010 and finalized in April 2011. The CY'11 Annual Report presenting the findings from the 2011 semi-annual sampling events was submitted in December 2011 and finalized in December 2011 and finalized in December 2011.

Revision 1 to the Long-Term Monitoring Plan was issued in August 2012 and finalized in September 2012 (Tetra Tech, 2012b). Semi-annual monitoring rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra Tech, 2012c). The CY'12 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was submitted December 13, 2012. Regulator comments were received and resolved in April 2013. The final report was prepared in May and issued in June 2013 (Tetra Tech 2013). Semi-annual monitoring rounds were conducted in March and September 2013-. A data report presenting the results from the March 2013 sampling was issued in July 2013 (Tetra Tech 2013a). The CY'13 Annual Report, presenting the results of the September sampling event and evaluating the calendar year results was submitted December 11, 2013. Comments were received January 22, 2014. No response to the comments was required and the report was finalized in February 2014 (Tetra Tech, 2014a). Revision 2 to the Long-Term Monitoring Plan was issued February 2014 (Tetra Tech, 2014f). Semi-annual monitoring rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was issued in June 2014 (Tetra Tech, 2014b). The CY'14 Annual Report, presenting the results of the September sampling and evaluating the calendar year results was submitted for review on December 17. Comments were received by January 21, 2015 and responded to on February 5, 2015. Resolution of comments was reached on April 7, 2015 and the final CY' 14 Annual Report was issued April 21, 2015 (Tetra Tech, 2015).

As presented in Table 5-5, long-term monitoring and reporting is ongoing at the WOD Site. The AAOC requires that NASA conduct a review of ongoing RAs every five years until EPA issues a Certificate of Completion documenting that cleanup standards have been achieved. Since remedial action commenced with the implementation of the pilot study in December 2008, it has been determined that the final Five-Year Review was due by December 2013. The review of WOD RAs was initiated in December 2012 and the Draft Five-Year Review was submitted on June 10, 2013. Regulator comments were received and responded to in November 2013. Comment resolution extended through December and EPA granted a one month extension for issuing the final document. The final Five-Year Review was issued February 4,

2014 (Tetra Tech, 2014g). EPA issued a letter concurring with and approving the report on March 6, 2014 (EPA, 2014).

As confirmed in the Five-Year Review for the WOD Site, long-term monitoring and reporting is expected to continue until the cleanup goals are attained. Based on the findings of the long-term monitoring through 2014, a revision to the long-term monitoring program limiting the analytical parameters to total and dissolved arsenic was prepared and submitted to EPA and DEQ for review on July 27. EPA had no comments on the draft and DEQ issued comments on August 25, 2015. NASA issued responses to DEQ comments August 27, 2015. Resolution of the comments was reached on September 15, 2105 and the final Long-Term Monitoring Plan Rev 3 was issued September 21, 2015 (Tetra Tech, 2015j). Concurrent to reviewing and approving the revised monitoring plan, the Team agreed at the September RPM meeting that the reduction in the parameters to arsenic only, would be implemented for the spring 2015 sampling. The sampling was conducted in March 2015 and the Semi-Annual Sampling Data Report was issued May 27 (Tetra Tech, 2015a). The fall semi-annual sampling was conducted September 23 and the draft CY-15 Annual Groundwater Summary Report, presenting the results and evaluating the calendar year and longterm trends, was submitted December 8, 2015. DEQ comments were received January 20 and EPA comments on February 22, 2016. Responses to comments were submitted in March and resolved in April 2016. The final Annual Groundwater Monitoring Report for Year 2015 was issued April 22, 2016 (Tetra Tech, 2016). No changes were recommended or implemented at the end of the 2015 sampling and the spring 2016 sampling event was conducted in April 2016. The data report presenting the findings was submitted June 22, 2016 (Tetra Tech, 2016a). The semi-annual sampling continued in April and October 2016; the report was finalized and issued in February 2017 (Tetra Tech, 2017), with the recommendation to reduce the sampling frequency to twice every five years with one sampling event in the spring and one in the fall. The last round of sampling was conducted in October 2017, with the next round planned in Spring 2020. The report was issued as a draft on February 1, 2018; the EPA and DEQ comments were received on February 22 and 28, 2018, respectively. The final report was issued on March 13, 2018 (NASA, 2018c). The next round of sampling is scheduled for March 2020.

The draft of the 2018 Five-Year Review for this site was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019 (NASA, 2019a), with EPA concurrence on March 7. The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019. Table 5-5 presents the anticipated schedule for the ongoing monitoring program schedule through FY'21.

FY-'20-'21 SMP

## 5.2.6 Scrapyard Site (N-222)

As discussed in Section 4.1.8 and indicated in Table 5-6, NASA submitted a final work plan for groundwater characterization studies at the Scrapyard in November 2004 and completed the phased field activities in May 2005. The results of the groundwater study were presented in a final report in December 2005 (Weiss and Associates 2005a). As presented in the FY 2006 SMP, NASA prepared a Summary Site Status Report that presented and evaluated existing soil and groundwater data from the Scrapyard Site. The report was submitted in May 2006 and finalized in August 2006 after resolution of comments (TtNUS, 2006a). The report concluded that the removal actions completed at the Site had addressed the potential risks associated with potential soil exposures and that the current soil and groundwater conditions did not present an unacceptable risk to human health or the environment. EPA and DEQ concurred with this conclusion as expressed in review comments and it was agreed by the Project Team to proceed with a No Further Action PRAP and ROD (EPA, 2006; NASA 2006a). The schedule for the Summary Site Status Report was accelerated and EPA approval of the Final Summary Site Status Report was received on October 2, 2006. Draft and final versions of the Scrapyard PRAP were submitted in FY 2007. The draft No Further Action ROD was prepared and submitted in May 2007 and finalized in November 2007. The final ROD was issued in January 2008 and approved in February 2008. As presented in Table 5-6, no further action is planned for the Scrapyard as the Site has been closed under the AAOC.

#### 5.2.7 Photographic Tank Site (M-15)

As discussed in Section 4.1.9 ecological risk evaluations for the Photographic Tank Site were completed in FY 2007. Based on these assessments the Project Team concluded that No Action was required at the Site to protect human health or the environment. This conclusion was documented in a Decision Statement signed by EPA, DEQ and NASA and included in the final Ecological Risk Evaluation Report. As indicated in Table 5-7, no further action is anticipated for the Photographic Tank Site.

# 5.2.8 Former Fire Training Area (FFTA)

Table 5-8 presents the accomplishments through 2014 and schedule of deliverables for the FFTA over the next two Fiscal Years. As discussed in Section 4.1.10 the draft and final FS report was submitted in 2005. EPA approval of the final FS Report was received in September 2005 and the draft PRAP was submitted in November 2005. EPA comments on the draft PRAP were received in February 2006 and responses submitted in mid-March 2006. Comment resolution extended until September 11, 2006 and included the preparation and submittal of several draft final versions of the PRAP. The Final PRAP was submitted on September 28, 2006 and was approved by EPA and DEQ in January 2007. The PRAP was

5-9

published in February and a public meeting was held March 1, 2007. No comments were received during the public comment period and the draft ROD was submitted for EPA and DEQ review on April 12, 2007. The final ROD was prepared and submitted November 1, 2007 and approved and issued December 19, 2007. Draft Pilot Study Work Plan and LUC Design documents were submitted in March 2008 and regulator comments were received in May 2008. Responses to comments were submitted in June 2008, and final resolution was reached in October. Final documents were submitted on November 3, 2008 and were approved in December 2008. The Pilot Study field work was conducted in December 2008. The results were presented in a draft Pilot Study Report submitted in April and finalized in July 2009. Based on the results of the pilot study, the Project Team agreed to place the RA on hold and conduct an additional supplemental groundwater sampling event. The work plan for this sampling event was issued in June and approved in July. The sampling was conducted in August 2009 and the analytical results and findings were presented in a Letter Report in December 2009. Regulator Comments were received in February 2010, response to comments were presented and resolved in March 2010, and the Final Sampling Report was submitted in April 2010 (TtNUS, 2010f). A Quarterly Groundwater Sampling Plan, to support an additional three rounds of monitoring, was submitted in February, and received regulator approval in March 2010 (TtNUS, 2010g). Four quarterly sampling events were conducted in 2010. An annual report evaluating the calendar year 2010 results was submitted in March 2011 and finalized in November 2011. The CY 2010 results were used to support the decision that no further active RAs were necessary for the FFTA Site. A draft RACR was prepared and submitted in May 2011. Regulator comments were received in October 2011. NASA responses to the comments were submitted in November and the Final RACR was issued in December 2011. In addition, an LTM Plan, as a required component of the ROD, was prepared and submitted in April and Finalized in August 2010 (TtNUS, 2010j).

NASA conducted CY 2011 LTM sampling events in March and September 2011. A data report for the March sampling event was submitted on June 22, 2011. The draft CY'11 Annual Report, presenting the March and September results, was prepared and submitted for review in December 2011 and finalized in June 2012 (Tetra Tech, 2012d).

Revision 1 to the Long-Term Monitoring Plan was issued and finalized in August 2012 (Tetra Tech, 2012e). Semi-annual monitoring rounds were conducted in March and September 2012. A data report presenting the results from the March 2012 sampling was issued in May 2012 (Tetra Tech, 2012f). The CY'12 Annual Report, presenting the results of the September sampling and evaluating the calendar year results was submitted in December 2012. Regulator comments were received in April and resolved in May 2013. The final report was prepared in May and issued in June 2013 (Tetra Tech, 2013b). The CY'13 sampling events were conducted in March and September of 2013. A data report presenting the results of the March 2013 (Tetra Tech, 2013b). The CY'13 sampling events were conducted in March and September of 2013. A data report presenting the results of the March 2013 sampling was issued in July 2013 (Tetra Tech, 2013c). The CY'13 Annual

Report, presenting the results of the September sampling event and evaluating the calendar year results was submitted December 11, 2013. Comments were received January 22, 2014. No response to the comments was required and the report was finalized in February 2014 (Tetra Tech, 2014c). Revision 2 to the Long-Term Monitoring Plan was issued February 2014 (Tetra Tech, 2014h). Semi-annual monitoring rounds were conducted in March and September 2014. A data report presenting the results from the March 2014 sampling was issued in June 2014 (Tetra Tech, 2014d). The CY'14 Annual Report, presenting the results of the September sampling and evaluating the calendar year results, was submitted for review on December 17. Comments were received by January 30, 2015 and responded to on February 20, 2015. Resolution of comments was reached on April 7, 2015 and the final CY' 14 Annual Report was issued April 21, 2015 (Tetra Tech, 2015b).

As presented in Table 5-8, long-term monitoring and reporting is ongoing at the FFTA Site. The AAOC requires that NASA conduct a review of ongoing RAs every five years until EPA issues a Certificate of Completion documenting that cleanup standards have been achieved. Since RA commenced with the implementation of the pilot study in December 2008, it is has been determined that the final Five-Year Review was due by December 2013. The review of FFTA RAs was initiated in December 2012 and the Draft Five-Year Review was submitted on June 10, 2013. Regulator comments were received and responded to in November 2013. Comment resolution extended through December and EPA granted a one month extension for issuing the final document. Comment resolution was reached on January 8, 2014 and the final Five-Year Review was issued February 4, 2014 (Tetra Tech, 2014g). EPA issued a letter concurring with and approving the report on March 6, 2014 (EPA, 2014).

As confirmed in the Five-Year Review for the FFTA Site, long-term monitoring and reporting is expected to continue until the cleanup goals are attained. Based on the findings of the long-term monitoring through 2014, a revision to the long-term monitoring program reducing the field parameters and revising the monitoring frequency and reporting requirements was prepared and submitted to EPA and DEQ for review on July 27. Comments were received on August 13, 2015. NASA issued responses to comments August 27, 2015. Resolution of the comments was reached on September 15 and the final Long-Term Monitoring Plan Rev 3 was issued September 21, 2015 (Tetra Tech, 2015o). Concurrent to reviewing and approving the revised monitoring plan, the Team agreed at the September RPM meeting that the reduction in the field parameters to eliminate nitrate/nitrite, ferrous iron, alkalinity, and hydrogen sulfide would be implemented for the spring 2015 sampling. It was also agreed that the monitoring frequency would be reduced to every nine months (periodic monitoring) and that reporting would consist of issuing sampling/data reports after each sampling event and trend analysis would be addressed in the next five-year review report.

The spring CY'15 sampling was conducted March 20, 2015 and the Sampling Data Report was issued May 27 (Tetra Tech, 2015k). The fall 2015, or tenth round monitoring event, was conducted in December 2015 and the data report of findings submitted February 16, 2016 (Tetra Tech, 2016b). The eleventh event was completed September 28, 2016 and the Monitoring Data Report was issued January 3, 2017 (Tetra Tech, 2016g). The twelfth round of sampling was completed in June 2017 with the report issued in November 2017 (NASA, 2017). The projected monitoring events are based on a nine-month frequency. In accordance with the recommendations presented in the Five-Year Review Report, sampling and analysis for PFAS was completed to support a protectiveness evaluation to be completed in the next five-year review report. The most recent Periodic Monitoring event (9-month) was completed March 28, 2018 and the Draft Monitoring Data Report was issued June 26, 2018 (NASA, 2018e). EPA approval was received on September 20, 2018.

The next round of sampling (Round 14) was completed in December 2018 and the Draft Monitoring Data Report was issued April 24, 2019. Regulator comments were received on May 23 (DEQ) and May 24 (EPA). A revised FFTA Report was submitted on July 30, 2019. Additional comments were received from both the DEQ and EPA on September 4, 2019 and the final Report was submitted on September 30 (NASA, 2019b). EPA approval of the report was received on November 1, 2019 and DEQ approval was received on November 4, 2019. The next round of sampling is scheduled for March 2020.

The draft of the 2018 Five-Year Review for this site was submitted on October 2, 2018. Following regulator comment in October (DEQ) and November (EPA), the final Five-Year Review was submitted on February 18, 2019 (NASA, 2019a), with EPA concurrence on March 7. The Public Notice announcing the completion of the Five-Year Review ran on March 20 and 21, 2019.

Table 5-8 presents the anticipated schedule for the monitoring and reporting at the FFTA.

#### 5.2.9 <u>Pistol/Rifle Range (Main Base Firing Range Complex)</u>

As presented in Section 4.1.11, information available from the ASR indicates that the Pistol/Rifle range was part of a complex built by the Navy that included a pistol, rifle, machine gun testing, and skeet range. The ASR was finalized in October 2005 (USACE, 2005). In 2006, the NASA environmental staff met with WFF management and confirmed that the range complex was currently inactive and would not be reopened for use. NASA completed a review of historical records and documents for the range and prepared and submitted a draft SI Work plan in September 2006. The draft work plan, prepared to address all range activities in the study area (referred to as the Main Base Firing Range Complex), was finalized in May 2007 and approved by EPA in August 2007. Field investigations were conducted in November 2007 and the draft SI report was submitted in March 2008 after EPA granted a schedule

extension. Regulator comments were received in June and final resolution was reached in October 2008. The final SI Report was submitted November 2008 and a revised final, prepared in response to additional DEQ comments, was issued in February and approved in March 2009. A Technical Memorandum proposing removal action cleanup goal options was submitted in April 2009 and a supplemental sampling was conducted in July 2009. A summary report presenting the results of the sampling was submitted in August 2009. As discussed in Section 4.1.11, activities at the Site were placed on hold pending the results of a Potential Responsibility Party evaluation. In FY 2014 NASA and USACE agreed that NASA would take responsibility for the former Pistol and Rifle Ranges and the former Skeet Range would remain in the FUDS program. NASA conducted a review of historical data and information from the Pistol/Rifle Range and issued a draft Site Summary and Risk Re-Evaluation in August 2014. The report evaluates the site risks based on current guidance, identifies data gaps, and recommends a NTCRA to address unacceptable risks. Comments on the draft report were received in late October 2014. Comments were resolved in February 2015 and the final Site Summary and Risk Re-Evaluation was issued March 5, 2015 (Tetra Tech, 2015c).

Based on the completed range complex site investigations, it was agreed NASA-led removal actions are appropriate to address the contamination identified at the Pistol/Rifle Range. It was also agreed that additional supplemental sampling was required to further define the potential extent of the removal action at specific firing points. NASA submitted a letter work plan for sampling at the former rifle range firing points in March 2015. Regulator comments were received and resolved in May and the final plan was issued May 15, 2015 (Tetra Tech, 2015d). Concurrent to the review and approval of the rifle range sampling plan, NASA prepared and submitted a letter work plan for additional sampling at the Aircraft Gun Test Range. The plan was submitted and approved on May 15, 2015. Sampling was conducted at both ranges in June 2015 and the results presented in a Data Summary Report dated July 27, 2015 (NASA, 2015a). The report was accepted as final. Concurrent to the sampling, NASA initiated preparation of an EE/CA for a NTCRA at the Pistol/Rifle Range. The draft EE/CA was submitted June 16, 2015. Regulator comments received in August and responses submitted on September 23, 2015. Comments were resolved in December and the final document issued December 8, 2015 (Tetra Tech, 2015m). A public notice regarding the removal action was published and no comments were received during the comment period from January 13, 2016 to February 15, 2016. A draft AM describing the removal action was issued in November 2015. Comments were received by January 14, 2016 and resolved in February 2016. The final AM authorizing the NTCRA was signed in March and issued in April 2016 (NASA, 2016). A draft RAWP detailing the planned action was submitted for regulator review in January 2016. Comments were received in April and responses issued on April 15, 2016. Comment resolution was reached in May and the final RAWP was issued May 24, 2016 (Tetra Tech, 2016e). The soil removal action was conducted from May through August 2016, and the draft Construction Completion report was submitted for review on November 10, 2016. The Construction Completion Report was finalized in March

2017 (Tetra Tech, 2017b) and NASA, EPA, and DEQ signed a NFA Consensus Statement on March 21, 2017. As indicated in Table 5-9, no further action is anticipated for the Pistol/Rifle Range.

## 5.2.10 South End Disposal Area (SEDA)

Table 5-10 presents the 2014 accomplishments and schedule of deliverables for the SEDA over the next two Fiscal Years. As discussed in Section 4.1.12 a Limited Response Action was completed in November 2010 and a final Limited Action Summary Report was submitted February 7, 2011. A Site Screening Report, or PA, was prepared the draft was submitted May 10, 2011.

Regulator comments were received in late September and responded to in November 2011. Comment resolution was reached in September 2012 and the final Preliminary Assessment Report was issued on September 28, 2012 (Tetra Tech, 2012g). A draft Sampling and Analyses plan was submitted in July and finalized in September 2012 (Tetra Tech, 2012h). The site screening sampling was conducted in November 2012, and the draft Site Screening Report was submitted April 1, 2013. Comments were received June 22, 2013 and responses were issued August 16, 2013. Comment resolution extended into January 2014. The final Site Screening Report was issued in March 2014 (Tetra Tech, 2014e). An NFA Concurrence Statement for SEDA was signed and issued in March 2014 (Tetra Tech, 2014e). Table 5-10 reflects the completion of all planned activities for this Site.

#### 5.2.11 <u>Area of Interest – 20 (AI-20)</u>

As discussed in Section 4.1.13 NASA decided to assume responsibility for AI-20 from the FUDS Program in FY 2014. A reconnaissance of the site was conducted and several planning sessions with EPA and DEQ occurred in FY 2014. Based on a review of site conditions and data reported from the USACE, NASA prepared a Work Plan to conduct a site screening and characterization to provide data to support planning and implementing a removal action. The draft Site Screening Work Plan was submitted on August 21, 2014. Comments were received September 8, 2014 and resolved by September 19, 2014. The final Site Screening Work Plan was issued September 30, 2014 (Tetra Tech, 2014j). The site screening investigations was completed in December 2014 and the draft Site Screening Report issued February 20, 2015. Comments were received and resolved in April and the final Site Screening Report issued May 15, 2015 (Tetra Tech, 2015e).

Based on the site findings it was agreed that NASA would conduct a TCRA to address releases at the site. NASA submitted a draft Action Memorandum for regulator concurrence on March 10, 2015. Regulator comments were received March 30 and resolved in late April. NASA finalized and issued the Action Memorandum on June 29, 2015 (NASA, 2015b). To support the TCRA, a draft RAWP was

prepared and submitted to the regulators for review on April 9, 2015. EPA and DEQ comments were received May 19, 2015 and responded to and resolved in June 2015. The final RAWP was issued July 24, 2015 (Tetra Tech, 2015f). A public notice announcing the removal action was published in the local newspapers July 29 and 30, 2015. Removal actions at AI-20 were completed in late August 2015. The Removal Action Completion Report, presenting the post removal sampling results and summarizing removal activities, was submitted in December 2015. Comments were received March 1, 2016, responded to March 16, 2016, and resolved in June 2016. The report was finalized in July and A No Further Action Concurrence Statement was signed by EPA, DEQ and NASA on September 20, 2016 (NASA, 2016a). Table 5-11 reflects the completion of all planned activities for this Site.

#### 5.2.12 North Island Transformers

As discussed in Section 4.1.13 NASA decided to assume responsibility for North Island Transformers from the FUDS Program in FY 2014. A review of historical photographs, facility plans, and an aerial reconnaissance was conducted in FY 2014. Several planning sessions with EPA and DEQ occurred in FY 2014 and based on a review of conditions at AI-20, NASA prepared a Work Plan to conduct a site screening of North Island Transformers. The objective of the site screening is to determine if transformers and/or PCB contamination are present at the 17 locations. The draft Site Screening Work Plan was submitted on August 21, 2014. Comments were received September 15, 2014 and resolved by September 23, 2014. The final Site Screening Work Plan was issued September 30, 2014 but a revised final, correcting an error, was issued October 15, 2014 (Tetra Tech, 2014k). The site screening investigation was completed in December 2014. A draft Site Screening report was submitted February 24, 2015. EPA and DEQ comments were received March 30, 2015 and responded to on May 22, 2015. Comment resolution extended to August 4, 2015 and the final report was issued August 10, 2015 (Tetra Tech, 2015g). Based on the results of the site screening, NASA, EPA and DEQ agreed that No Further Action was necessary for former transformer locations NIT-9, -10, -11, and -15, additional screening was warranted at NIT-2, -3, -4, -5, -6, -8, -12, -13, and -16, and action was required at NIT-1, -7, -14, and -17.

A draft Site Characterization Work Plan for further investigations at NIT-1 and NIT-17 was submitted on March 13. Regulator comments were received March 25, 2105, responded to on April 23, and resolved in May 2015. The final work plan was issued June 16, 2015 (Tetra Tech, 2015h). The field work and sampling were conducted in July and August 2015. The draft report of findings was submitted to EPA and DEQ on October 26, 2015 and finalized in January 2016 (Tetra Tech, 2016c). The findings confirmed that a TCRA was an appropriate action for NIT-1, NIT-7, NIT-14 and NIT-17. An AM documenting the need for and authorizing the action was submitted in November 2015. Comments were received in December 2015, resolved in January 2016, and the final AM was finalized and signed in January 2016 (NASA, 2016b). A draft RAWP detailing the planned action was submitted to EPA and DEQ for review December

8, 2015. Comments were received and resolved in January 2016. The final RAWP was issued February 18, 2106. A public notice announcing the removal action was published in March 2016. The TCRA was implemented from March through April 2016 and a draft Construction Completion Report documenting the action was submitted for review in August 12, 2016. Comments were received in October 2016 and responses submitted in November and resolved on November 25, 2016. The final report was submitted in December 2016 (Tetra Tech, 2016h). On March 21, 2017, NASA, EPA, and DEQ signed a NFA Consensus Statement for NITs -1, -7, -14, and -17.

A letter work plan for conducting additional site screening at the remaining NIT locations was prepared and submitted to the regulators on June 25, 2015. EPA and DEQ comments were received on July 24 and the final work plan was issued July 29, 2015 (Tetra Tech, 2015i). Field sampling was conducted in September and a Technical Memorandum presenting the findings was submitted in December and finalized and issued in February 2016 (NASA, 2016c). The findings confirmed that no additional action was required at the remaining transformer locations. A Consensus Document summarizing the actions taken at the 13 transformer locations not addressed by removal actions, was prepared and submitted March 22, 2016. Comments were received by June 2016 and resolved in July 2016. The final document containing a No Further Action Concurrence Statement was finalized in July and signed by EPA, DEQ and NASA September 20, 2016 (NASA, 2016d).

Table 5-12 reflects the completion of all planned activities at this site.

# 5.2.13 Structures F-10A/F-10B (Paint Locker and Battery Shop)

As discussed in Section 4.1.15 an SI to determine if releases have occurred at Structures F-10A/F-10b is under development. The draft Work Plan and sampling and analysis plan was submitted September 13, 2016. EPA and DEQ comments were received at the end of October 2016. The work plan for conducting an SI at F-10A/F-10B was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments on the report is ongoing.

The schedule for planned activities for F-10A/F-10B is presented in Table 5-13.

# 5.2.14 Structure N-166 (Alcohol Storage Building)

As discussed in Section 4.1.16 an SI to supplement existing data and to determine if releases have occurred at Structure N-166 is under development. The draft Work Plan and sampling and analysis plan was submitted September 13, 2016. The work plan for conducting an SI at N-166 was finalized in December 2016 (Tetra Tech, 2016i) and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments on the report is ongoing.

The schedule for planned activities for N-166 is presented in Table 5-14.

# 5.2.15 Former Circular Area (FCA)

As discussed in Section 4.1.17 an SI to determine if releases have occurred at FCA is under development. The draft Work Plan and sampling and analysis plan was submitted September 13, 2016. The work plan for conducting an SI at FCA was finalized in December 2016 and, following field activities, the draft SI Report was issued in June 2017. NASA submitted the Draft Final Site Screening Report on December 11, 2017. Comments from the DEQ were received on December 21, 2017 and comments from the EPA were received on February 13, 2018. This document has been discussed at RPM Meetings and resolution of regulator comments on the report is ongoing.

The schedule for planned activities for FCA is presented in Table 5-15.

# 5.2.16 PFAS Sampling

In response to detecting the presence of PFAS compounds in the FFTA groundwater, NASA initiated a drinking water sampling program. On April 7, 2017, NASA submitted a draft work plan for sampling and analyzing NASA and the Town of Chincoteague water supplies and select monitoring wells for PFAS. To supplement this planned sampling, NASA prepared and submitted a work plan Addendum to advance soil borings and collect groundwater grab samples at the western boundary of the facility. EPA and DEQ had no comments on the draft Work Plan. DEQ had no comments on the Addendum and EPA comments on the Addendum were received April 10, 2017. Response to comments and the final Addendum were issued April 19, 2017. EPA and DEQ concurred with the Addendum and the final Addendum was approved on April 19. 2017. NASA conducted sampling in April and May 2017. NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies and has established a

working group of stakeholders to ensure a consensus on ongoing actions. A draft report of these activities was submitted in July 2017 with the final report submitted in October 2017 and approved by the regulators that same month. NASA coordinated these efforts with the TOC, EPA, DEQ and other local, state, and federal agencies and has established a working group of stakeholders to ensure a consensus on ongoing actions.

The water supply sampling and analysis program (including WFF wells, TOC wells, and Trails End Campground wells) continues and is adjusted and directed, with input from the stakeholders listed above, as analytical results become available. A Public Information Session to discuss the sampling and results was held on June 14, 2017 at the WFF Visitor Center.

The water supply sampling and analysis program (including WFF wells, TOC wells, and Trails End Campground wells) continues and is adjusted and directed, with input from the stakeholders listed above, as analytical results become available. Sampling since the last SMP (December 2018) has included monthly (bi-monthly during the summer months) sampling of the WFF drinking water wells and WFF finished drinking water and the Town of Chincoteague drinking water wells and finished drinking water. The water supply sampling and analysis program continues on a monthly basis and is adjusted and directed as analytical results become available. To this point, no finished drinking water samples have contained PFAS above the EPA HA. Public Information Sessions to discuss the sampling and results were held on December 19, 2018 and April 2, 2019 at the WFF Visitor Center.

A Draft Data Report for PFAS perimeter monitoring and observation well installation and sampling was submitted on March 15, 2018. EPA comments were received on August 15, 2018; on August 8, 2018, DEQ accepted the report with no comments. Responses to the EPA comments were submitted on November 28, 2018. The EPA accepted the responses on January 31, 2019 and the Final report was submitted on February 8, 2019 (NASA, 2019c). Following installation, quarterly sampling of these wells has continued. A draft annual report, covering the sampling through June 2018, was submitted on February 6, 2019. DEQ comments were received on February 27, 2019 and EPA responses were received on March 28, 2019. NASA submitted responses to comments on September 11, 2019; EPA and DEQ approved the responses on September 12, 2019 and September 16, 2019, respectively. The final annual report was submitted on September 27, 2019 (NASA, 2019d). DEQ final approval was received on November 4, 2019. EPA final approval was received on December 20, 2019.

NASA also submitted a Draft Preliminary Assessment and Site Investigation (SI) Work Plan for PFAS at WFF on May 24, 2018. DEQ indicated on June 19, 2018 that it did not have comments. EPA comments were received on July 12, 2018. The revised document with responses to comments was submitted on November 1, 2018. EPA and DEQ comments on the document were received on February 20 and 21,

2019, respectively. The final Work Plan was submitted on March 29, 2018 (NASA, 2019e). DEQ approval was received on April 8, 2019. Field work was completed from April through September 2019. The results through the initial sampling were discussed in a meeting with EPA, DEQ, and other stakeholders on July 10, 2019 and additional sampling was agreed upon. The draft SI Report will be submitted in December 2019. At the September 2019 RPM Meeting, it was agreed that additional surface water sampling would take place quarterly for a period of one year; the first round of this sampling occurred in October 2019.

The schedule for planned PFAS sampling activities is presented in Table 5-16.

#### 5.3 SCHEDULE MODIFICATIONS

As stated above, site-specific project schedules are presented in Tables 5-1 through 5-16. Working schedules to be used as a management tool for use in day-to-day management and tracking of site progress are made available to the Project Team at project meetings and are used for the preparation of progress reports (see Section 5.4). Methods for updating and/or modifying project schedules are discussed below.

Section XXIII of the AAOC recognizes that project schedules may require modification and revision as work proceeds and allows that they may be modified by mutual agreement between the EPA and NASA Project Coordinators (U.S. EPA Docket Number: RCRA-03-2004-0201TH). Modifications are to be made in writing and become effective on the date that the EPA Project Coordinator signs the agreement. In order to avoid potential stipulated penalties for failure to comply with the AAOC, an agreement to modify a schedule date should be in place before the effected schedule date or duration. The NASA Project Coordinator will notify the EPA Project Coordinator and request a schedule modification as soon as practical after learning of a potential schedule impact.

## 5.4 SITE MANAGEMENT PLAN UPDATES AND REPORTING

The FY 2006 SMP was submitted as a draft in November 2005, finalized in May 2006 and approved by EPA in June 2006 (TtNUS, 2006c). In accordance with the AAOC, the approved SMP is to be updated annually to reflect completed, ongoing, and planned activities. Each update is required to be a planning tool that addresses the activities that will be completed in the ensuing two Fiscal Years (U.S. EPA Docket Number: RCRA-03-2004-0201TH). Based on the schedules established in the initial SMP, annual updates are to be submitted to EPA and DEQ for review and approval each December. The draft 2007 SMP was submitted November 30, 2006 and finalized in March 2007 (TtNUS, 2007g). The draft version of the 2008 SMP was submitted November 28, 2007 and finalized in May 2008 (TtNUS, 2008c). The

draft version of the 2009 SMP was submitted December 3, 2008 and finalized in April 2009 (TtNUS, 2009k). The draft version of the 2010 SMP was submitted December 1, 2009 and finalized in February 2010 (TtNUS, 2010). The draft version of the 2011 SMP was submitted December 10, 2010 and finalized in June 2011 (TtNUS, 2011c). The draft version of the 2012 SMP was submitted December 5, 2011 and finalized in April 2012 (TtNUS, 2012k). The draft version of the 2013 SMP was issued on December 13, 2012. Comments were received and responded to in April 2013. Comment resolution was not reached until September and the final 2013 SMP was issued September 17, 2013 (Tetra Tech, 2013e). The 2014 SMP was due December 1, 2013 but because of the delay in finalizing the 2013 SMP, EPA granted an extension until February 2014 for the 2014 SMP. The draft version of the 2014 SMP was issued on February 11, 2014. Comments were received and responded to in March 2014. The final 2014 SMP was issued March 19, 2014 (Tetra Tech, 2014i). The 2015 SMP was due December 1, 2014 but because of other mission critical activities at the facility, EPA granted an extension until December 22, 2014 for the 2015 SMP. The draft was submitted December 17, 2014. Regulator comments were received February 9 and responded to February 15, 2015. Resolution of comments was confirmed in May and the final FY 2015 and FY 2016 SMP was issued June 9, 2015 (Tetra Tech, 2015I). The FY 2016 and FY 2017 SMP was submitted December 1, 2015 and finalized in June 2016 after resolving comments received in April 2016 (Tetra Tech, 2016f). The FY2017 and FY2018 SMP was submitted on December 9, 2016 and finalized in April 2017 after resolution of regulator comments. This FY2018 and FY2019 SMP was submitted as a draft on December 11, 2017 and finalized in March 2018 after resolution of regulator comments (NASA, 2018d). The FY2019 and FY2020 SMP was submitted as a draft on December 12, 2018 and finalized on June 10, 2019 after resolution of regulator comments (NASA, 2019f). The FY2020 and FY2021 SMP will be submitted as a draft in December 2019.

In addition to annual SMP updates, NASA is required to provide EPA with semi-annual progress reports. The FY 2006 semi-annual progress report was submitted on May 25, 2006 (TtNUS, 2006d). Subsequent semi-annual progress reports are due at 6-month intervals. EPA and NASA have agreed that the Annual SMP update shall serve as one of the required semi-annual progress reports. The 2007 semi-annual progress report was submitted in May 2007 (TtNUS, 2007h). The 2008 semi-annual progress report was submitted in May 2007 (TtNUS, 2007h). The 2008 semi-annual progress report was submitted in May 2007 (TtNUS, 2007h). The 2008 semi-annual progress report was submitted in May 2008. The 2009 semi-annual progress report was submitted on June 1, 2009 (TtNUS, 2010m). The 2010 semi-annual progress report was submitted on May 26, 2010 (TtNUS, 2010n). The 2011 semi-annual progress report was submitted on June 22, 2011 (NASA, 2011). The 2012 semi-annual progress report was submitted on May 30, 2012 (TtNUS, 2012I). EPA and NASA agreed that since the 2013 SMP was undergoing review and finalization throughout most of FY 2013, a semi-annual progress report was issued by NASA June 16, 2015. The FY 2016 semi-annual progress report was issued by NASA June 16, 2015. The FY 2016 semi-annual report was issued by NASA June 1, 2016. The FY 2017 semi-annual report was issued on May 8,

5-20

2017. The FY 2018 semi-annual report was issued by NASA July 14, 2018 (NASA, 2018f). The FY 2019 semi-annual report was issued by NASA June 27, 2019 (NASA, 2019g) and approved by DEQ on July 1 and EPA on July 9.

Table 5-17 presents the accomplishments through FY 2019 and schedules for Annual SMP Updates and Semi-Annual Progress Reports for the next two Fiscal Years.

# 6.0 PROJECT TEAM/COORDINATORS

The AAOC requires that EPA and NASA identify Project Coordinators for the implementation of the AAOC. NASA, EPA, and DEQ have established a working program for the completion of environmental restoration activities addressed under the AAOC. Although DEQ is not a party to the AAOC, DEQ has been provided an opportunity to concur with the terms of the AAOC and NASA is required to submit the SMP, specific notifications, and copies of submissions (documents) to DEQ for review (U.S. EPA Docket Number: RCRA-03-2004-0201TH). It is NASA's intent to seek DEQ concurrence and approval on all submissions prepared under the Work to Be Performed clauses of the AAOC, providing that such does not cause NASA to be found in noncompliance with any requirement of the AAOC.

During FY 2007, EPA transitioned Project Coordinators, after issuing the notification required by the AAOC, from Jerry Hoover to Steve Hirsh. During FY 2017, the EPA transitioned Project Coordinators from Steve Hirsh to Lorie Baker; the transition occurred in conjunction with the March 17, 2017 RPM Meeting. The change in Project Coordinators became effective April 5, 2007. During FY 2008, NASA transitioned Project Coordinators, after issuing the notification required by the AAOC, from Carolyn Turner to Theodore J. Meyer. The change in Project Coordinators, after issuing the notification required by the AAOC, from Carolyn Turner 2014, NASA transitioned Project Coordinators, after issuing the notification required by the AAOC, from Theodore J. Meyer to David Liu. The change in Project Coordinators became effective August 15, 2014. The names, addresses, and responsibilities of the project team members are as follows:

#### <u>NASA</u>

David Liu, P.E. Project Coordinator NASA Goddard Space Flight Center Wallops Flight Facility Building F-160 Code 250.W Wallops Island, Virginia 23337

#### <u>EPA</u>

Lorie Baker Project Coordinator U.S. EPA, Region III (3SD12) 1650 Arch Street Philadelphia, Pennsylvania 19103

# DEQ

Paul Herman, P.E. Remediation Project Manager Virginia Department of Environmental Quality Office of Remediation Programs P.O. Box 1105 Richmond, Virginia 23218

# 6.1 PROJECT COORDINATION

The NASA, EPA, and DEQ Project Coordinators meet regularly to review and discuss the status of activities at NASA WFF. In addition, a representative from the USACE often participates in these meetings to provide the project team with updates on FUDS related activities. Before each meeting, a meeting agenda is circulated among and concurred on by the Project Coordinators and USACE. NASA records meeting minutes and distributes the minutes to the Project Coordinators for review and approval. The meetings are used by the project team to track environmental restoration program progress under the requirements of the AAOC and this SMP, to review and jointly plan, establish and modify schedules of activities, to discuss site-specific issues and priorities, and to reach and document concurrence or resolution of issues as appropriate. The meeting minutes are used to document these discussions and decisions.

NASA provides funding to the Commonwealth of Virginia to ensure that DEQ is represented in the environmental restoration process.

The Project Team continued to communicate through extensive use of email and teleconferencing this period and held formal meetings in April and September 2019.

# 7.0 FORMERLY USED DEFENSE SITES (FUDS)

As described in Section 2.2, the DOD designated the USACE Baltimore District as the office responsible for establishing and implementing the FUDS program at NASA WFF. The USACE has been conducting investigations and coordinating work with NASA at WFF since 1998. Under this program the USACE established a series of "Projects" to fund and track progress under the program. A Project may include multiple sites or areas of interest with similar contaminants, sources, and/or locations that may result in increased efficiencies in implementing response actions. Appendix C presents a listing of the Projects established at NASA WFF.

In FY 2015, NASA and DOD, through the Department of the Army, negotiated and signed a MOA delegating CERCLA response action authority for the FUDS Program at NASA WFF to NASA (NASA, 2015). Under the agreement, the DOD will continue to fund the FUDS Program but NASA will be responsible for implementing the program. The MOA lists the FUDS identified at that time, identifies the current status, and establishes a process for evaluating and identifying additional sites as appropriate. The DOD and NASA also agreed to a transition plan for transferring Projects from USACE to NASA. As established in the MOA, the FUDS Program at NASA is limited by the Environmental Restoration, FUDS (ER,F) funding made available to NASA by DOD on an annual basis. NASA will request funding from DOD on a fiscal year basis but the annual funding is limited to \$2,000,000. The current and planned status for each Project is discussed in the following sections.

## 7.1 PROJECT DESCRIPTION AND STATUS

### 7.1.1 Project 03 – Gunboat Point, Strafing Target, and EOD Area

Project 03 is located at the north end of Wallops Island and consists of the Gunboat Point Bombing Area, Strafing Target, Explosive Ordnance Disposal (EOD) Area, and Target Center. The USACE issued the Final Military Munitions Response Program (MMRP) Site Inspection Report on March 30, 2012 (USACE, 2012). The report recommends, and the regulators concurred, that the land portion of the Munitions Response Site (MRS) proceed to the Remedial Investigation (RI) phase. NASA currently anticipates requesting funds for this Project in FY20. Note that the water portion of Project 03 is referred to in the Site Inspection, but the MEC Hazard Assessment was listed as "Not Rated" and the Risk Screening Assessment was listed as "Not Evaluated". The Site Inspection recommendation for Project 03 is "Future investigation, if warranted."

## 7.1.2 Project 04 – Machine Gun and Rocket Firing Area

Project 04 is located in the central Atlantic Ocean side of Wallops Island and consists of the Machine Gun and Rocket Firing Area. The Final MMRP SI Report was issued March 30, 2012. The report recommends, and the regulators concurred, the land portion of the MRS proceed to the RI phase (USACE, 2012a). NASA currently anticipates requesting funds for the RI in FY21. Note that the water portion of Project 03 is referred to in the Site Inspection; the MEC Hazard Assessment was listed as "Low based on available historical information" and the Risk Screening Assessment was listed as "Not Evaluated". The Site Inspection recommendation for Project 04 is "Future investigation, if warranted."

# 7.1.3 <u>Project 05 – Grebe Range and Explosive Ammunition Test Facility Located on Central to</u> Northern Portion of Wallops island

Project 05 is located in the central Atlantic Ocean side of Wallops Island and consists of the Grebe Range/20-mm Gun Slab, and Explosive Ammunition Test Facility. The Final MMRP SI Report was issued March 30, 2012 (USACE, 2012b). The report recommends, and the regulators concurred, the land portion of the MRS proceed to the RI phase. NASA currently anticipates requesting funds for the RI in FY22. Note that the water portion of Project 05 is referred to in the Site Inspection; the MEC Hazard Assessment was listed as "Low based on available historical information" and the Risk Screening Assessment was listed as "Not Evaluated". The Site Inspection recommendation for Project 05 is "Future investigation, if warranted."

# 7.1.4 <u>Project 06 – Wallops Island Naval Air Ordnance Training Station (NAOTS) Cantonment</u> <u>Area</u>

Project 06 consists of 13 Areas of Interest (Als) located on the northern end of WI. The Als are located together in one grouping and are associated with former DOD activities associated with non-MMRP operations within in a cantonment area. USACE Baltimore District completed the SI addressing the 13 Als and EPA, DEQ, NASA, and USACE signed a No Further Action Consensus Statement based on effective facilities control on September 20, 2017. No other NASA action under the FUDS Program is planned for at this time.

# 7.1.5 Project 07 – Boat Basin and Visitor's Center

Project 07 consists of a single MRS (MRS 7) on the eastern portion of the MB. The MRS has includes the Pyrotechnic Dump, Gun Butt Numbers 1 and 2, and the south bank of the Boat Basin. A draft MMRP RI Report, investigating munitions and explosives of concern (MEC) and munitions constituents (MC), was

submitted by USACE Baltimore District. This Project was planned for transition to NASA management upon completion of the RI. However, both DEQ and EPA had significant comments on the draft RI. USACE has not provided a schedule for completing the RI Report; therefore, the transition is being delayed.

NASA received and obligated funding for a FS, Proposed Plan, and ROD for this site in FY 2017; these funds must be spent by September 30, 2022.

## 7.1.6 Project 08 – Boat Basin Area

Project 08 consists of nine Als located near the Boat Basin on the eastern portion of the MB. The Als are all associated with non-MMRP activities in support of DOD operations that occurred in and around the boat basin. A final SI, recommending No Further Action, was issued by USACE Baltimore District on July 20, 2012 (USACE, 2012c). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature; the Consensus Statement will be submitted by March 31, 2020. No NASA action under the FUDS Program is planned for at this time.

#### 7.1.7 Project 09 – Skeet Range

Project 09 consists of a Skeet Range located within the MB. As discussed in Section 2 and further detailed in Section 4.1.11, the Skeet Range was part of a larger range complex that included rifle, aircraft gun, and pistol ranges. An SI of the range complex was conducted under the NASA ECR Program in 2007 and a final SI was issued in 2009 (TtNUS, 2009g). Further supplemental sampling was conducted in 2009 and NASA, EPA and DEQ agreed that a NTCRA would be appropriate to address the type and level of contamination identified at the ranges (TtNUS, 2009h and TtNUS, 2009i). However, before further action was taken a site ownership/operation review was completed and it was determined that the Skeet Range was a former DOD operation and the Skeet Range portion of the range complex was transferred to the FUDS Program. The USACE conducted a MMRP SI of the Skeet Range and issued the final SI Report August 24, 2012 (USACE, 2012d). The SI recommended the MRS proceed to the RI phase.

Responsibility for further FUDS response actions at Project 09 has been transitioned to NASA under the MOA. NASA had planned to conduct a supplemental sampling investigation at the Skeet Range to determine whether a removal action or RI was appropriate for this site. The draft Sampling and Analysis Plan (SAP) for supplemental sampling for the Skeet Range was submitted in September 2016. The SAP document included a presentation of potential Preliminary Remediation Goals (PRGs) to be applied in designing the sampling approach and in developing the planned Engineering Evaluation/Cost Analysis (EE/CA). DEQ and EPA comments on the draft SAP were received November 3, 2016 and January 6, 2017, respectively. NASA responses to comments were issued March 9, 2017 and a teleconference with EPA and DEQ reviewers was held March 21, 2017. As a result of the teleconference, NASA issued a revised Technical Memorandum evaluating and presenting potential PRGs on April 25, 2017. The approach and goals presented in the Technical Memorandum were reviewed and discussed in the June RPM Meeting. The Project Team determined that a RI will be conducted at the Skeet Range rather than the previously planned EE/CA and Removal Action.

The draft RI SAP was submitted in September 2017; DEQ and EPA comments were received by December 11, 2017. The Final RI SAP was submitted on March 13, 2018 (NASA, 2018b) and fieldwork was completed on March 31, 2018. After review of the site data, it was determined that additional field activities will be required to obtain the data necessary to complete the RI. A RI SAP Addendum was submitted on July 20, 2018. Regulator comments were received on September 21, 2018 and NASA submitted the responses and revised SAP Addendum on October 23, 2018 (NASA, 2018g). The SAP Addendum was approved on November 9, 2018. Field work associated with the SAP Addendum was completed on March 27, 2019. The Draft RI Report was submitted on September 17, 2019. EPA and DEQ comments were received in October 2019. NASA will submit responses to the comments in December 2019.

Table 7-1 presents the projected schedule for the Skeet Range.

#### 7.1.8 Project 10 – Practice Bombing Target

Project 10 consists of the Practice Bombing Target (approximately 160 acres) located in the tidal marshes east of the Main Base. The Practice Bombing Target was constructed in late 1943 and operations ceased prior to June 1959. A Site Inspection, which included a munitions response site reconnaissance and collection of nine co-located sediment and surface water samples, was conducted in March 2012. The Site Inspection Report (September 2012) concluded that further investigation or removal action was not required for munitions of environmental concern or munitions constituents. No other NASA action under the FUDS Program is planned for at this time.

#### 7.1.9 Project 11 – Main Base Areas of Interest

Project 11 consists of 88 Als located in the central portion of the MB. The Als are associated with activities and structures in support of DOD operations in and around the main runways and hangars. An SI was conducted by USACE Baltimore District and, under the MOA, the project has transitioned to NASA

management following completion of the SI. The draft SI was issued in September 2015 and the final SI was issued in September 2017. NASA submitted the draft RI SAP on February 8, 2019. The EPA and DEQ provided their comments on March 16 and March 29, respectively. The project was discussed in depth at the April 2, 2019 RPM meeting. At that meeting, it was determined that a different sampling approach, with a focus on investigative areas at the site, should be used. NASA updated the sampling protocol and discussed in detail at the September 17, 2019 RPM Meeting. An additional scoping meeting is scheduled for December 12, 2019, with the RI SAP completed based on the outcome of that meeting.

Two Project 11 Als, Al-28 (Former Garbage House) and Al-67 (Former Ordnance Shop) were identified as requiring additional investigation. Therefore, an Expanded Site Investigation (ESI) will be completed at each Al. The Draft ESI Work Plan was submitted by NASA on November 1, 2017. Comments from the DEQ were received on November 21, 2017 and from the EPA on November 30, 2017. NASA submitted the Final Work Plan on January 24, 2018 (NASA, 2018a). The field activities were completed on February 1, 2018. The Draft ESI Report was submitted by July 3, 2018. Comments were received from the EPA on October 12, 2018 and a follow-up conference call was held on October 24, 2018 and NASA is currently preparing the response to comments. Comments were not received from the DEQ.

A schedule of projected activities is presented in Table 7-2.

# 7.1.10 Project 12 – Petroleum, Oil and Lubricant (POL) Storage and Distribution

Project 12 consists of tanks and associated pipelines associated with DOD operations at the MB. Project 12 includes 8 Als. Site characterization and investigations are being conducted under state petroleum storage programs. The USACE Baltimore District has attained closure with the state through the Tidewater Regional Office. NASA is currently assisting the USACE in preparation of a draft Consensus Statement and expects to submit it by March 31, 2018 for regulator review. No other NASA action under the FUDS Program is planned for at this time.

# 7.1.11 Project 13 – Old Waste Water Treatment Plant (WWTP)

Project 13 consists of the former wastewater treatment plant (WWTP) located on the north central portion of the MB. The USACE Baltimore District issued the final FS for the site in May 2015 (USACE, 2015). Project 13 has been transitioned to NASA for management under the FUDS Program. NASA submitted a draft PRAP on January 22, 2016. Comments were received in March and resolved in April 2016. Issuance of the final PRAP was delayed until comments had been resolved on other facility PRAPs to allow for one public comment period. The final PRAP was issued August 31, 2016 (NASA, 2016f). No comments were received during the public comment period that extended from September 14, 2016 through October 14,

2016. NASA submitted a draft ROD for the WWTP on June 23, 2016 and a draft final ROD was submitted on July 24, 2017. DEQ correspondence approving the ROD was received on February 8, 2017; EPA comments were received on June 1, 2017. A revised draft final ROD was submitted on July 11, 2017. EPA technical review comments were received and a response was submitted on February 1, 2018. Additional EPA technical comments were received on March 18 and October 26, 2018 and resolution of these comments is pending. EPA legal comments are also pending. EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ. The re-calculation of background will be used to compare site soil and groundwater concentrations and may be useful in resolving the remaining EPA comments. Table 7-3 presents the projected schedule of activities for Project 13.

NASA received and obligated funding for a FS, Proposed Plan, and ROD for this site in FY 2017; these funds must be spent by September 30, 2022.

# 7.1.12 Project 14 – Regulus Launch Area

The Regulus Launch Area underwent a screening-level investigation in 2012. In addition, available soil analytical data were compared to the USEPA screening levels for residential and industrial soil and the Main Base Background values. Groundwater analytical results were compared to the USEPA Region III RSLs for Tapwater and Main Base Background values.

The findings and analytical results show that the Regulus Launch Area does not pose a significant impact which would result in an unacceptable risk to human health or the environment. No munitions and explosives of concern (MEC) was found onsite. Constituent concentrations exceeded RSLs in soil and groundwater, however the concentrations were below background values.

NASA is currently assisting the USACE in preparation of a draft No Further Action Consensus Statement and expects to submit it by July 31, 2019 for regulator review. No other NASA action under the FUDS Program is planned for at this time.

# 7.1.13 Project 15 – Active Remediation Projects

Project 15 consists of 9 sites. Each Project 15 site is addressed separately below.

FY-'20-'21 SMP

#### Site 9 – Abandoned Drum Dump

Site 9 is located in the north side of the MB and consists of a former drum disposal area used during DOD operations. The USACE conducted investigations, performed removal actions and completed a RI. The final RI was issued in November 2012 and concluded that remaining soil contamination did not present unacceptable risks (USACE, 2012e). However, the RI also concluded that groundwater contamination from an unknown upgradient source was present above the MCL and presents an unacceptable risk.

Site 9 Soil has been transitioned to NASA for management under the FUDS Program. NASA revised a PRAP prepared by the USACE and submitted a draft PRAP for soil on November 23, 2015. Comments were received in January and resolved in March 2016. Issuance of the final PRAP was delayed until comments had been resolved on other facility PRAPs to allow for one public comment period. The final PRAP for soil was issued May 19, 2016 (NASA, 2016g). No comments were received during the public comment period that extended from May 25, 2016 through June 25, 2016. NASA submitted a draft ROD for Site 9 on April 7, 2016, responses to regulator comments were submitted on February 3, 2017, and additional responses and a revised ROD for review were submitted on July 24, 2017. EPA technical review comments have been received and a response was submitted on February 1, 2018. Two additional rounds of comments and responses were completed; EPA approved the responses on October 12, 2018. NASA submitted the pre-final ROD for soil, sediment, and surface water on November 1, 2018; EPA comments were received and resolved on February 21, 2019. Final signatures on the ROD are being held until the Administrative Order on Consent (AOC) for FUDS is signed. Table 7-4 presents the projected schedule of activities for Site 9 Soils.

Site 9 groundwater and the unacceptable risk associated with groundwater contamination from a suspected upgradient source will be reviewed with the USACE to determine FUDS eligibility after finalization of the Project 11 RI.

#### Construction Debris Landfill (CDL)

The CDL is located in the northern portion of the MB on property currently leased to NOAA and consists of four adjacent areas used for the disposal of materials during DOD operations at WFF. The USACE Baltimore District has conducted a series of investigations and studies at the site and has identified the presence of contamination that presents unacceptable risks to human health and the environment. The USACE conducted additional supplemental field investigations at the site and included them in a draft FS in 2019; there were significant EPA and DEQ comments on this document. USACE transitioned the project to NASA in September 2019. NASA will not complete the FS; instead, the project will be transitioned toward implementation of an interim removal action and an EE/CA will be prepared. USACE

will provide funding in FY 20 to complete the Supplemental Field Investigation Report and develop planning documents (EE/CA, AM, and RAWP) for an NTCRA to address soil, sediment, and waste.

#### Site 14 - Debris Pile

Site 14 consists of a three debris piles located on a steep slope to the north of and adjacent to the eastwest runway on the MB. The USACE Baltimore District completed an RI for Site 14 in 2013 (USACE, 2013). The RI concluded that the Site 14 contamination did not present an unacceptable risk. Site 14 has been transitioned to NASA for management under the FUDS Program. NASA submitted a draft PRAP on November 23, 2015. Comments were received in February and resolved in March. Issuance of the final PRAP was delayed until comments had been resolved on other facility PRAPs to allow for one public comment period. The final PRAP was issued May 19, 2016 (NASA, 2016h). No comments were received during the public comment period that extended from May 25, 2016 through June 25, 2016. NASA submitted a draft ROD for Site 14 on March 14, 2016; DEQ comments were received in May 2016. DEQ accepted NASA responses in February 2017. A revised ROD for EPA review was submitted by NASA on August 30, 2017. EPA technical comments were received on January 11, 2018. Response to comments were submitted on June 14, 2018. Additional EPA comments were received on October 30, 2018; resolution of these comments is on-going. EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ. The re-calculation of background will be used to compare site soil and groundwater concentrations and may be useful in resolving the remaining EPA comments. Table 7-5 presents the projected schedule of activities for Site 14.

#### Site 15 - Debris Pile

Site 15 consists of a debris pile located west of and adjacent to the north-south runway on the MB. The USACE Baltimore District completed an RI for Site 15 in 2013 (USACE, 2013). The RI concluded that the Site 15 contamination did not present an unacceptable risk. Site 15 has been transitioned to NASA for management under the FUDS Program. NASA submitted a draft PRAP on November 23, 2015. Comments were received in February and resolved in March. Issuance of the final PRAP was delayed until comments had been resolved on other facility PRAPs to allow for one public comment period. The final PRAP was issued May 19, 2016 (NASA, 2016). No comments were received during the public comment period that extended from May 25, 2016 through June 25, 2016. NASA submitted a draft ROD for Site 15 on March 14, 2016. Comments were received in May (DEQ) and June (EPA) 2016. Response to comments were submitted in August 2016; follow-on comments from the DEQ were received in August 2016. The DEQ accepted NASA responses in February 2017. A revised ROD for EPA review was submitted by NASA on August 30, 2017. EPA technical comments were received on January 11, 2018.

Response to comments were submitted on June 14, 2018. Additional EPA comments were received on October 30, 2018; resolution of these comments is on-going. EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ. The re-calculation of background will be used to compare site soil and groundwater concentrations and may be useful in resolving the remaining EPA comments. Table 7-6 presents the projected schedule of activities for Site 15.

#### Site 48 – M Area Disturbed Soil

Site 48 is located north of runway 10/28 and consists of an area of disturbed soil that was identified during an analysis of historical aerial photographs. The USACE Baltimore District completed a series of investigations of the area to determine if the site presented a risk and if further response actions were warranted. The USACE issued a final SI in 2013 recommending no further action at the site (USACE, 2013). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature by March 31, 2019. No other NASA action under the FUDS Program is planned for at this time.

#### Site 49 – Runway 10/28 West End Disturbed Soil Site

Site 49 is located at the west end of runway 10/28 and consists of an area of disturbed soil that was identified during an analysis of historical aerial photographs. The USACE Baltimore District completed a series of investigations of the area to determine if the site presented a risk and if further response actions were warranted. The USACE issued a final SI in 2013 recommending no further action at the site (USACE, 2013). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature by March 31, 2019. No other NASA action under the FUDS Program is planned for at this time.

#### <u>Site 50 – Boat Basin Disturbed Soil Site</u>

Site 50 is located at the MB Boat Basin and consists of an area of disturbed soil that was identified during an analysis of historical aerial photographs. The USACE Baltimore District completed a series of investigations of the area to determine if the site presented a risk and if further response actions were warranted. Further study and evaluation of the site was conducted under Project 8 (see above). The USACE issued a final SI in 2012 recommending no further action at the site (USACE, 2012c). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature by July 31, 2020. No other NASA action under the FUDS Program is planned for at this time.

#### Site 51 – Airplane Parts Disposal Area

Site 51 is located north of the FFTA and consists of an area of disturbed soil that was identified during an analysis of historical aerial photographs. The USACE Baltimore District completed a series of investigations of the area to determine if the site presented a risk and if further response actions were warranted. The USACE issued a final SI in 2013 recommending no further action at the site (USACE, 2013). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature by July 31, 2020. No other NASA action under the FUDS Program is planned for at this time.

#### Site 52 – Runway 04/22 North End Construction Debris Area

Site 52 is located on NOAA leased property west of the CDL site and consists of an area of disturbed soil that was identified during an analysis of historical aerial photographs. The USACE Baltimore District completed a series of investigations of the area to determine if the site presented a risk and if further response actions were warranted. The USACE issued a final SI in 2013 recommending no further action at the site (USACE, 2013). The regulators concurred with the findings presented in the SI, however a close-out document confirming the No Further Action determination has not been completed. NASA is currently assisting the USACE in preparation of a Consensus Statement for regulator signature by July 31, 2020. No other NASA action under the FUDS Program is planned for at this time.

#### 7.1.14 Project 17 – PRP Main Base

Project 17 consists of four Als located on the MB (B-51 Plating Shop B-51 B; F-10 NAOTS Hangar, Technical Services Shop and Offices F-10J; D-44 – Fertilizer Building D-44 H Storage of Fertilizer; N-159 – Air Maintenance Hangar N-159) identified in a series of preliminary assessments and site screenings conducted by the USACE in conjunction with the EPA and DEQ but were not included in Project 11. The four were designated as Potential Responsible Party (PRP) sites because at the time it was not evident if the Als were FUDS eligible. Project 17 has been transitioned to NASA for management under the FUDS Program. NASA has initiated a review and screening of the Als to determine if they are sites and warrant a response action. NASA submitted a draft Study Area Screening Evaluation (SASE) Report on June 1, 2016. Comments were received from DEQ in June and from EPA in October 2016. Responses to the

comments were submitted on October 31, 2016 and resolved in November 2016. The SASE report was finalized in December 2016 and a No Further Action Concurrence Statement was signed by EPA, DEQ and NASA on March 21, 2017 (NASA, 2016j).

REFERENCES

## REFERENCES

Ebasco, 1990. Final Report of Site Investigation for Wallops Flight Facility. Wallops Island, VA. January.

EPA, 1988. United States Environmental Protection Agency. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final. EPA/540/G-89-004. October.

EPA, 1991. United States Environmental Protection Agency. Guidance for Performing Preliminary Assessments Under CERCLA. EPA/540/G-91/013. September.

EPA, 1992. United States Environmental Protection Agency. Guidance for Performing Site Inspections Under CERCLA Interim Final. EPA540-R-92-021. September.

EPA, 1995. United States Environmental Protection Agency. Remedial Design/Remedial Action Handbook. EPA 540/R-95/059. June.

EPA, 1995a. United States Environmental Protection Agency. Scoping the Remedial Design. EPA 540/F-95/008. March.

EPA, 1996. United States Environmental Protection Agency. Aerial Photographic Analysis NASA Wallops Flight Facility, Wallops Island, VA. May.

EPA, 1999. United States Environmental Protection Agency. Improving Site Assessment: Abbreviated Preliminary Assessments. EPA-540-F-98-037. October.

EPA, 1999. United States Environmental Protection Agency. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents. EPA 540-R-98-031. July.

EPA, 2001. United States Environmental Protection Agency. Operation and Maintenance in the Superfund Program. EPA 540-F-01-004. May.

EPA, 2001a. United States Environmental Protection Agency. Comprehensive Five-Year Review Guidance. EPA 540-R-01-007. June.

EPA, 2004. United States Environmental Protection Agency. Aerial Photographic Analysis NASA Wallops Flight Facility Site, Wallops Island, VA. March.

EPA, 2004. United States Environmental Protection Agency. Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation. OSWER Directive No. 9355.4-28. January.

EPA, 2006. Letter from Michelle H. Price-Fay to Carolyn Turner. July 27.

EPA, 2014. Letter from Kathryn A. Hodgkiss to William Wrobel. March 2014.

EPA 2014a. EPA Certificate of Completion for Site 5 – Paint Stain and Site 12 Former Wind Tunnel for the NASA Wallops Flight facility, Wallops Island, Virginia. June.

U.S. EPA Docket Number: RCRA-03-2004-0201TH. Administrative Agreement on Consent, United States Environmental Protection Agency Region III in the Matter of National Aeronautic and Space Administration Wallops Island, Virginia. September.

FWEC, 2003. Foster Wheeler Environmental Corporation. Removal Action Completion Report for Site 005 and Site 012 Wallops Flight Facility. July.

FWEC, 2003a. Foster Wheeler Environmental Corporation. Work Plan for the Removal Action at Site 005 and Site 012 Wallops Flight Facility. January.

FWEC, 2003b. Foster Wheeler Environmental Corporation. Final Work Plan for the Supplemental RI at Wallops Flight Facility Sites 5 and 12. August.

FWEC, 2003c. Foster Wheeler Environmental Corporation. Work Plan for the Removal at N-222 Scrapyard Area. April.

FWEC, 2004. Foster Wheeler Environmental Corporation. Removal Action Completion Report for N-222 Scrapyard Area Wallops Flight Facility. June.

Metcalf & Eddy, 1992. Final Report Revision of Site Investigation Wallops Flight Facility Wallops Island, Virginia. August.

Metcalf & Eddy, 1993. Fire Training Area Remedial Investigation/Feasibility Study Final Work Plan Wallops Flight Facility Wallops Island, Virginia. March.

Metcalf & Eddy, 1995. Limited Remedial Investigation Report for the Scrapyard Area Wallops Flight Facility Wallops Island, Virginia. August.

Metcalf & Eddy, 1995a. Limited Remedial Investigation/Feasibility Study Final Work Plan Scrapyard Area, NASA GSFC, Wallops Flight Facility. January.

Metcalf & Eddy, 1995b. Proposed Project Approach for Radiological Survey, Scrapyard, Wallops Flight Facility. May.

Metcalf & Eddy, 1996. Site Inspection for Miscellaneous Sites at Wallops Flight Facility. March.

Metcalf & Eddy, 1996a. Former Fire Training Area Remedial Investigation Report NASA Wallops Flight Facility Wallops Island, Virginia. February.

MicroPact Engineering, 2003. Final Desktop Audit Summary Report for the Site Screening Process Wallops Flight Facility Accomack County, Virginia. July.

NASA, 1988. National Aeronautics and Space Administration. Preliminary Assessment Report for Wallops Flight Facility Wallops Island, Virginia. April.

NASA, 2003. Notification and Certification Requirements of 40 CFR Part 761.61. March.

NASA, 2004. National Aeronautics and Space Administration. Consensus Document Sites 1, 3, 9, 13, 14, and 15, and Construction Debris Landfill and Industrial/Sanitary Landfill Sites NASA Wallops Flight Facility Wallops Island, Virginia. September.

NASA, 2004a. National Aeronautics and Space Administration. Consensus Document Site 6-Former Island Fueling Station, Site 8-Former Main Base Fueling System, and Old Aviation Fuel Tank Farm NASA Wallops Flight Facility Wallops Island, Virginia. September.

NASA 2004b. National Aeronautics and Space Administration. Letter Report - Waste Oil Dump (WOD) Groundwater Sampling Results; From Sue Fields to Michelle Price-Fay and Paul Herman. November.

NASA 2004c. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. February 18.

NASA 2004d. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. November 10.

NASA 2005. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. March 7.

NASA, 2006. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. January 24.

NASA, 2006a. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. May 8.

NASA, 2008. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. December.

NASA, 2008a. National Aeronautics and Space Administration. Final Remedial Project Managers Meeting Summary. June.

NASA, 2009. National Aeronautics and Space Administration. Decision Document Archive Search Report Sites. March.

NASA, 2010, National Aeronautics and Space Administration. Meeting Minutes for May 27, 2010 Teleconference on Wallops Island South End Disposal Area.

NASA, 2011, National Aeronautics and Space Administration. Transmittal Letter for Final Site Management Plan Fiscal Years 2011 and 2012 and Fiscal Year 2011 Semi-Annual Progress Report. June.

NASA, 2011a. National Aeronautics and Space Administration. Decision Document Site 5 – Paint Stain and Site 12 – Former Wind Tunnel. NASA Wallops Flight Facility Wallops Island, Virginia. October.

NASA, 2015, National Aeronautics and Space Administration & Department of the Army. Memorandum of Agreement Wallops Flight Facility, VA. February.

NASA, 2015a. Data Summary Report for the Rifle Range and Aircraft Gun Testing Range at NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. July.

NASA, 2015b. Action memorandum Time-Critical Removal Action Area of Interest 20 (AI-20) pole Mounted Transformer NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. June.

NASA, 2016. Action Memorandum Non-Time Critical Removal Action for Soil Main Base Firing Range Complex (MBFR) Pistol Range, Wallops Flight Facility, Wallops Island, VA. April.

NASA, 2016a. Construction Completion Report Time-Critical Removal Action for Soil Area of Interest 20 (AI-20) Pole Mounted Transformer, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. July.

NASA, 2016b. Action Memorandum Time-Critical Removal Action for Soil North Island Transformers NIT-1, NIT-7, NIT-14 and NIT-17, Wallops Flight Facility, Wallops Island, VA. January.

NASA, 2016c. Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations at Wallops Flight Facility, Wallops Island, VA. February.

NASA, 2016d. Consensus Document No Further Action North Island Transformer Locations NIT-2, NIT-3, NIT-4, NIT-5, NIT-6, NIT-9, NIT-10, NIT-11, NIT-12, NIT-13, NIT-15 and NIT-16 Wallops Flight Facility, Wallops Island, VA. February.

NASA, 2016e. Work Plan Groundwater Investigation for Perfluorinated Compounds at Former Fire Training Area Wallops Flight Facility, Wallops Island, VA. October.

NASA, 2016f. Proposed Plan for Formerly Used Defense Site Project 13 – Former Wastewater Treatment Plant (WWTP), Located at Wallops Flight Facility, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. September.

NASA, 2016g. Proposed Plan for Project 15, Site 9 – Drum Disposal Area Soils, Located at Wallops Flight Facility, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. May.

NASA, 2016h. Proposed Plan for Project 15, Site 14 – Debris Pile, Located at Wallops Flight Facility, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. May.

NASA, 2016i. Proposed Plan for Project 15, Site 15 – Debris Pile, Located at Wallops Flight Facility, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. May.

NASA, 2016j. Projects 11 and 17 Areas of Interest Study Area Screening Evaluation, Former Navy Sites, Wallops Flight Facility, Wallops Island, VA. December.

NASA, 2017. Data Summary Report, June 2017 Groundwater Monitoring Former Fire Training Area. Wallops Flight Facility, Wallops Island, VA. November.

NASA, 2018a. Work Plan, Expanded Site Investigation at Area of Interest-28: Former Garbage House and AI-67: Former Ordnance Shop. Wallops Flight Facility, Wallops Island, VA. January.

NASA, 2018b. Sampling and Analysis Plan for Remedial Investigation at Formerly Used Defense Site, Project 9 – Former Skeet Range. Wallops Flight Facility, Wallops Island, VA. March.

NASA, 2018c. Data Summary Report for October 2017 Groundwater Monitoring Activities at Waste Oil Dump. Wallops Flight Facility, Wallops Island, VA. March.

NASA, 2018d. Site Management Plan, Fiscal Years 2018 and 2019. Wallops Flight Facility, Wallops Island, VA. March.

NASA, 2018e. Data Summary Report for the March 2018 Groundwater Investigation at the Former Fire Fighting Training Area. Wallops Flight Facility, Wallops Island, VA. March.

NASA, 2018f. Fiscal Year 2018 Semi-Annual Progress Report. Wallops Flight Facility, Wallops Island, VA. July.

NASA, 2018g. Sampling and Analysis Plan Addendum for Remedial Investigation at Formerly Used Defense Site, Project 9 – Former Skeet Range. Wallops Flight Facility, Wallops Island, VA. October.

NASA, 2019a. Second Five-Year Review Report. Wallops Flight Facility, Wallops Island, VA. February.

NASA, 2019b. Data Summary Report for the December 2018 Groundwater Investigation at the Former Fire Fighting Training Area. Wallops Flight Facility, Wallops Island, VA. September.

NASA, 2019c. Data Summary Report – PFAS Perimeter Monitoring Well and Observation Well Installation and Sampling. Wallops Flight Facility, Wallops Island, VA. February.

NASA, 2019d. 2018 PFAS Sampling Annual Summary Report. Wallops Flight Facility, Wallops Island, VA. September.

NASA, 2019e. Preliminary Assessment and Site Investigation Work Plan for Per- and Polyfluoroalkyl Substances. Wallops Flight Facility, Wallops Island, VA. March.

NASA, 2019f. Site Management Plan, Fiscal Years 2019 and 2020. Wallops Flight Facility, Wallops Island, VA. June.

NASA, 2019g. Fiscal Year 2019 Semi-Annual Progress Report. Wallops Flight Facility, Wallops Island, VA. June.

Occu-Health, 1999. Environmental Resources Document, NASA Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. October.

Tetra Tech, 2011. Construction Completion Report for Non-Time-Critical Removal Action For Soil, Site 4 – Island Debris Pile. NASA Wallops Flight Facility, Wallops Island, Virginia. December

Tetra Tech, 2012a. Annual Groundwater Monitoring Report for Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. July.

Tetra Tech, 2012b. Long Term Monitoring Plan – Rev 1 Waste Oil Dump Site. NASA Wallops Flight Facility, Wallops Island, Virginia. July.

Tetra Tech, 2012c. Data Summary Report for March 2012 Groundwater Monitoring at Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2012d. Annual Groundwater Monitoring Report for Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2012e. Long Term Monitoring Plan – Rev 1 Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. July.

Tetra Tech, 2012f. Data Summary Report for March 2012 Groundwater Monitoring at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2012g. Preliminary Assessment for South End Disposal Area. NASA Wallops Flight Facility, Wallops Island, Virginia. September.

Tetra Tech, 2012h. South End Disposal Area Soil and Groundwater Sampling and Analysis Plan. NASA Wallops Flight Facility, Wallops Island, Virginia. September.

Tetra Tech, 2012i. Remedial Design Work Plan Site 5 – Paint Stain and Site 12 – Former Wind Tunnel. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

Tetra Tech, 2012j. Wetland Delineation Report Site 5 – Paint Stain and Site 12 – Former Wind Tunnel. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2012k. Site Management Plan Fiscal Years 2012 and 3013. NASA Wallops Flight Facility, Wallops Island, Virginia. April.

Tetra Tech, 2012I. Fiscal Year 2012 Semi-Annual Progress Report. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2013. Annual Groundwater Monitoring Report for the Year 2012 for the Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2013a. Data Summary Report for March 2013 Groundwater Monitoring at Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2013b. Annual Groundwater Monitoring Report for the Year 2012 for Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2013c. Data Summary Report for March 2013 Groundwater Monitoring at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2013d. Remedial Design/Remedial Action Work Plan Site 5 – Paint Stain and Site 12 – Former Wind Tunnel. NASA Wallops Flight Facility, Wallops Island, Virginia. January

Tetra Tech, 2013e. Site Management Plan Fiscal Years 2013 and 2014. NASA Wallops Flight Facility, Wallops Island, Virginia. September.

Tetra Tech, 2014. Remedial Action Completion Report Site 5 – Paint Stain and Site 20- Former Wind Tunnel. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2014a. Annual Groundwater Monitoring Report for Waste oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech, 2014b. Data Summary Report for March 2014 Groundwater Monitoring for Waste oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2014c. Annual Groundwater Monitoring Report for Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech, 2014d. Data Summary Report for March 2014 Groundwater Monitoring for Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2014e. Final Site Screening Report South End Disposal Area. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech, 2014f. Long Term Monitoring Plan – Rev 2 Waste oil Dump Site. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech 2014g. Five Year Review. NASA Wallops Flight Facility, Wallops Island, Virginia. January.

Tetra Tech, 2014h. Long Term Monitoring Plan – Rev 2 Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech, 2014i. Site Management Plan Fiscal Years 2014 and 2015. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

Tetra Tech, 2014j. Work Plan for Site Screening Area of Interest 20. NASA Wallops Flight Facility, Wallops Island, Virginia. September.

Tetra Tech, 2014k. Work Plan for Site Screening North Island Transformers. NASA Wallops Flight Facility, Wallops Island, Virginia. October.

Tetra Tech, 2014L. Site Management Plan Fiscal Years 2015 and 2016. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2015. Annual Groundwater Monitoring Report for Waste oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. April.

Tetra Tech, 2015a. Data Summary Report for March 2015 Groundwater Monitoring for Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2015b. Annual Groundwater Monitoring Report for Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. April.

Tetra Tech, 2015c. Site Summary and Risk Re-Evaluation Report for the Main Base Firing Range Complex (Pistol and Rifle Ranges) NASA Wallops Flight Facility. Wallops Island, Virginia. February.

Tetra Tech, 2015d. Rifle Range Letter Work Plan, NASA Wallops Flight Facility. Wallops Island, Virginia. May.

Tetra Tech, 2015e. Site Screening Report at Area of Interest 20, NASA Wallops Flight Facility. Wallops Island, Virginia. May.

Tetra Tech, 2015f. Removal Action Work Plan Time Critical Removal Action for Soil Area of Interest 20 (AI-20) Pole-Mounted Transformer, NASA Wallops Flight Facility. Wallops Island, Virginia. July.

Tetra Tech, 2015g. Site Screening Report North Island Transformers, NASA Wallops Flight Facility. Wallops Island, Virginia. August.

Tetra Tech, 2015h. Work Plan Soil Characterization North Island Transformers NIT-1 and NIT-17, NASA Wallops Flight Facility. Wallops Island, Virginia. June.

Tetra Tech, 2015i. Supplemental Site Screening Work Plan Addendum North Island Transformers, NASA Wallops Flight Facility. Wallops Island, Virginia. July.

Tetra Tech, 2015j. Long Term Monitoring Plan – Rev 3 Waste oil Dump, NASA Wallops Flight Facility. Wallops Island, Virginia. September.

Tetra Tech, 2015k. Data Summary Report for March 2015 Groundwater Monitoring at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

Tetra Tech, 2015I. Study Area Screening Evaluation Former Navy Sites. NASA Wallops Flight Facility, Wallops Island, Virginia. September.

Tetra Tech, 2015m. Engineering Evaluation/Cast Analysis (EE/CA) for Non-Time Cortical Removal Action for Soil Main Base Firing Range Complex. NASA Wallops Flight Facility, Wallops Island, Virginia. December.

Tetra Tech, 2015o. Long Term Monitoring Plan – Rev 3 Fire Training Area, NASA Wallops Flight Facility. Wallops Island, Virginia. September.

Tetra Tech, 2016. Annual Groundwater Monitoring Report for Year 2015 for Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. April.

Tetra Tech, 2016a. Data Summary Report for April 2016 Groundwater Monitoring Activities at Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2016b. Data Summary Report December 2015 Groundwater Monitoring Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech 2016c. Soil Characterization Report North Island Transformers NIT-1 and NIT-17, NASA Wallops Flight Facility, Wallops Island, Virginia. January.

Tetra Tech, 2016d. Removal Action Work Plan for Time-Critical Removal Action for Soil North Island Transformers NIT-1, NIT-7, NIT-4 and NIT-17, NASA Wallops Flight Facility. Wallops Island, Virginia. February.

Tetra Tech, 2016e. Removal Action Work Plan Non-Time Critical Removal Action for Main Base Firing Range Complex Pistol Range and Rifle Range, NASA Wallops Flight Facility. Wallops Island, Virginia. February.

Tetra Tech, 2016f. Site Management Plan Fiscal Years 2016 and 2017. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2016g. September 2016 Groundwater Monitoring, Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. December.

Tetra Tech, 2016h. Time-Critical Removal Action Completion Report, North Island Transformers. NASA Wallops Flight Facility, Wallops Island, Virginia. December.

Tetra Tech, 2016i. Work Plan Site Investigation at Buildings F-10A, F-10B, and N-166 and the Former Circular Areas. NASA Wallops Flight Facility, Wallops Island, Virginia. December.

Tetra Tech, 2017. Annual Groundwater Monitoring Report for the Year 2016 for Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. February.

Tetra Tech, 2017a. Former Fire Training Area PFAS Data Summary Report. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

Tetra Tech, 2017b. Pistol/Rifle Range Non-Critical Removal Action (NTCRA) Construction Completion Report. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

Tetra Tech, 2017c. PFAS Sampling Letter Report. NASA Wallops Flight Facility, Wallops Island, Virginia. October.

Tetra Tech, 2017d. Letter Work Plan Perimeter Well Monitoring and PFAS Sampling. NASA Wallops Flight Facility, Wallops Island, Virginia. August.

Tetra Tech, 2017e. Letter Work Plan Production Well Aquifer Testing. NASA Wallops Flight Facility, Wallops Island, Virginia. October.

TtNUS, 2003. Tetra Tech NUS Corporation. Final Decision Document for Advanced Data Acquisition Support Facility (ADAS) Site NASA Wallops Flight Facility Wallops Island, Virginia. August.

TtNUS, 2003a. Tetra Tech NUS Corporation. Final Decision Document for Building N-161C PCB Transformer Pad Site NASA Wallops Flight Facility Wallops Island, Virginia. February.

TtNUS, 2003b. Tetra Tech NUS Corporation. Final Site Screening Document, M-15 Photographic Tank (Photo Tank) Site. NASA Wallops Flight Facility. Wallops Island, Virginia. October.

TtNUS, 2003c. Tetra Tech NUS Corporation. Work Plan for Supplemental Remedial Investigation Activities at the Former Fire Training Area and Waste Oil Dump, NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2004b. Tetra Tech NUS Corporation. Toxic Substance and Control Act Compliance Report for Sites 7 and 11 NASA Wallops Flight Facility Wallops Island, Virginia. September.

TtNUS, 2004c. Tetra Tech NUS Corporation. Revised Final Supplemental Remedial Investigation of the Former Fire Training Area NASA Wallops Flight Facility Wallops Island, Virginia. July.

TtNUS, 2004d. Tetra Tech NUS Corporation. Final Supplemental Remedial Investigation of the Waste Oil Dump Site NASA Wallops Flight Facility Wallops Island, Virginia. December.

TtNUS, 2004e. Tetra Tech NUS Corporation. Final Summary and Focused Ecological Risk Evaluation Report M-15 Photographic Tank Site NASA Wallops Flight Facility Wallops Island, Virginia. December.

TtNUS, 2004f. Tetra Tech NUS Corporation. Work Plan for Supplemental Site Investigation Building E-52, Site 2 NASA Wallops Flight Facility, Wallops Island, Virginia. November.

TtNUS, 2005. Tetra Tech NUS Corporation. Final Decision Document for Sites 7 and 11, NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2005a. Tetra Tech NUS Corporation. Final Letter Work Plan for the M-15 Photographic Tank (Photo Tank) Site, NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2005b. Tetra Tech NUS Corporation. Final Feasibility Study Waste Oil Dump NASA Wallops Flight Facility, Wallops Island, Virginia. October.

TtNUS, 2005c. Tetra Tech NUS Corporation. Final Feasibility Study Former Fire Training Area NASA Wallops Flight Facility, Wallops Island, Virginia. September.

TtNUS, 2005d. Tetra Tech NUS Corporation. Final Site Management Plan Fiscal Years 2005 and 2006 NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2005e. Tetra Tech NUS Corporation. Fiscal Year 2005 Semi-Annual Progress Report NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2006. Tetra Tech NUS Corporation. Final Supplemental Site Investigation Former Building E-52, Site 2 NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2006a. Tetra Tech NUS Corporation. Final Site Status Summary Report Scrapyard Site NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2006b. Tetra Tech NUS Corporation. Final Site Status Report Island Debris Pile, Site 4 NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2006c. Tetra Tech NUS Corporation. Final Site Management Plan Fiscal Years 2006 and 2007 NASA Wallops Flight Facility, Wallops Island, Virginia. June.

TtNUS, 2006d. Tetra Tech NUS Corporation. Fiscal Year 2006 Semi-Annual Progress Report NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2007. Tetra Tech NUS Corporation. Proposed Remedial Action Plan Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2007a. Tetra Tech NUS Corporation. Proposed Remedial Action Plan Scrapyard Site NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2007b. Tetra Tech NUS Corporation. Ecological Risk Evaluation M-15 Photographic Tank Site NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2007c. Tetra Tech NUS Corporation. Proposed Remedial Action Plan Former Fire Training Area NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2007d. Tetra Tech NUS Corporation. Work Plan and Quality Assurance Project Plan for Site Investigation Activities Main Base Firing Range Complex NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2007e. Tetra Tech NUS Corporation. Work Plan for the NASA TSCA Self-Implementing Remediation at Building X-115 NASA Wallops Flight Facility, Wallops Island, Virginia. July.

TtNUS, 2007f. Tetra Tech NUS Corporation. Record of Decision Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. December.

TtNUS, 2007g. Tetra Tech NUS Corporation. Site Management Plan Fiscal Years 2007 and 2008 NASA Wallops Flight Facility, Wallops Island, Virginia. March.

TtNUS, 2007h. Tetra Tech NUS Corporation. Fiscal Year 2007 Semi-Annual Progress Report NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2008. Tetra Tech NUS Corporation. Work Plan and Quality Assurance Project Plan for Site Investigation Activities Island Debris Pile (Site 4) NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2008a. Tetra Tech NUS Corporation. Record of Decision Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. March.

TtNUS, 2008b. Tetra Tech NUS Corporation. Record of Decision Scrapyard Site NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2008c. Tetra Tech NUS Corporation. Site Management Plan Fiscal Years 2008 and 2009. NASA Wallops Flight Facility, Wallops Island, Virginia. May

TtNUS, 2008d. Tetra Tech NUS Corporation. Remedial Design for Land Use Controls Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. December.

TtNUS, 2008e. Tetra Tech NUS Corporation. Pilot Study Work Plan Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. December.

TtNUS, 2008f. Tetra Tech NUS Corporation. Remedial Design for Land Use Controls Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. November.

TtNUS, 2008g. Tetra Tech NUS Corporation. Pilot Study Work Plan Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. November.

TtNUS, 2009. Tetra Tech NUS Corporation. Site Investigation Report for Island Debris Pile (Site 4) NASA Wallops Flight Facility, Wallops Island, Virginia. April.

TtNUS, 2009a. Tetra Tech NUS Corporation. Feasibility Study Report for Former Paint Stain and Wind Tunnel, Sites 5 and 12 NASA Wallops Flight Facility, Wallops Island, Virginia. September.

TtNUS, 2009b. Tetra Tech NUS Corporation. Remedial Action Work Plan Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. September.

TtNUS, 2009c. Tetra Tech NUS Corporation. Long-Term Monitoring Plan Waste Oil Dump Site NASA Wallops Flight Facility, Wallops Island, Virginia. October.

TtNUS, 2009d. Tetra Tech NUS Corporation. Free Product Monitoring Plan Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. April.

TtNUS, 2009e. Tetra Tech NUS Corporation. Pilot Study Report Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. July.

TtNUS, 2009f. Tetra Tech NUS Corporation. Supplemental Groundwater Sampling Letter Work Plan Former Fire Training Area Site NASA Wallops Flight Facility, Wallops Island, Virginia. July

TtNUS, 2009g. Tetra Tech NUS Corporation. Site Investigation Revision 1 Main Base Firing Range Complex NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2009h. Tetra Tech NUS Corporation. Main Base Firing Range Complex Teleconference Summary and Letter Work Plan NASA Wallops Flight Facility, Wallops Island, Virginia. June.

TtNUS, 2009i. Tetra Tech NUS Corporation. Summary for Supplemental Soil Sampling Main Base Firing Range Complex NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2009j. Tetra Tech NUS Corporation. Development of Removal Action Cleanup Goals Site4-Island Debris Pile NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2009k. Tetra Tech NUS Corporation. Site Management Plan Fiscal Years 2009 and 2010. NASA Wallops Flight Facility, Wallops Island, Virginia. April

TtNUS, 2010a. Tetra Tech NUS Corporation. Engineering Evaluation and Cost Analysis (EE/CA). Site 4 – Island Debris Pile. NASA Wallops Flight Facility, Wallops Island, Virginia. February

TtNUS, 2010b. Tetra Tech NUS Corporation. Action Memorandum. Site 4 – Island Debris Pile. NASA Wallops Flight Facility, Wallops Island, Virginia. April

TtNUS, 2010c. Tetra Tech NUS Corporation. Removal Action Work Plan. Site 4 – Island Debris Pile. NASA Wallops Flight Facility, Wallops Island, Virginia. July

TtNUS, 2010d. Tetra Tech NUS Corporation. Proposed Remedial Action Plan, Site 5-Paint Stain and Site 12-Former Wind Tunnel. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

TtNUS, 2010e. Tetra Tech NUS Corporation. Data Summary Report for 6-Month Post-Injection Sampling at Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2010f. Tetra Tech NUS Corporation. Data Summary Report for Additional Groundwater Investigation at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. April

TtNUS, 2010g. Tetra Tech NUS Corporation. March 2010 Groundwater Investigation Activities, Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

TtNUS, 2010h. Tetra Tech NUS Corporation. Data Summary Report for Additional Groundwater Investigation at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

TtNUS, 2010i. Tetra Tech NUS Corporation. Data Summary Report for June 2010 Groundwater Investigation at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. August.

TtNUS, 2010j. Tetra Tech NUS Corporation. Long Term Monitoring Plan, Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. August..

TtNUS, 2010k. Tetra Tech NUS Corporation. Work Plan for Wallops Island South End Disposal Area UXO/MEC Survey and Clearance Operations, NASA Wallops Flight Facility, Wallops Island, Virginia. October.

TtNUS, 2010I. Tetra Tech NUS Corporation. Site Management Plan, Fiscal Years 2010 and 2011,, NASA Wallops Flight Facility, Wallops Island, Virginia. February.

TtNUS, 2010m. Tetra Tech NUS Corporation. Fiscal Year 2009, Semi-Annual Progress Report. NASA Wallops Flight Facility, Wallops Island, Virginia. May.

TtNUS, 2010n. Tetra Tech NUS Corporation. Fiscal Year 2010, Semi-Annual Progress Report. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

TtNUS, 2010o. Tetra Tech NUS Corporation. Removal Action Work Plan Addendum, Pre-Construction Sampling, Site 4-Island Debris Pile. NASA Wallops Flight Facility, Wallops Island, Virginia. March.

TtNUS, 2010p. Tetra Tech NUS Corporation. Data Summary Report for September 2010 Groundwater Investigations at Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. December.

TtNUS, 2010q. Tetra Tech NUS Corporation. Long Term Monitoring Plant Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. July.

TtNUS, 2011a. Tetra Tech NUS Corporation. Remedial Action Completion Report Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. April.

TtNUS, 2011b. Tetra Tech NUS Corporation. Site Specific Report Wallops Island South End Disposal Area UXO/MEC Survey and Clearance Operations. NASA Wallops Flight Facility, Wallops Island, Virginia. January.

TtNUS, 2011c. Tetra Tech NUS Corporation. Site Management Plan Fiscal Years 2011 and 2012. NASA Wallops Flight Facility, Wallops Island, Virginia. June.

TtNUS, 2011d. Tetra Tech NUS Corporation. Annual Groundwater Monitoring Report for the Year 2010, Waste Oil Dump. NASA Wallops Flight Facility, Wallops Island, Virginia. November.

TtNUS, 2011e. Tetra Tech NUS Corporation. Annual Groundwater Monitoring Report for the Year 2010, Former Fire Training Area. NASA Wallops Flight Facility, Wallops Island, Virginia. November.

URS, 2006. Final Work Plan Island Debris Pile Best Management Practice For Waste Characterization and Surface Debris Clearing Activities NASA Wallops Flight Facility, Wallops Island, Virginia. September.

USACE, 1999. United States Army Corps of Engineers. Limited Site Characterization Report for NOAA Facility, NASA Wallops Flight Facility Wallops Island, Virginia. April.

USACE, 2000. United States Army Corps of Engineers. Wallops Flight Facility-Main Base-GIS\_Based Historical Photographic Analysis. 1938-1940. November.

USACE, 2003. United States Army Corps of Engineers. Limited Site Investigation Report Wallops Flight Facility Accomack County, Virginia. May.

USACE, 2003a. United States Army Corps of Engineers. Final Desktop Audit Summary Report for the Site Screening Process Wallops Island Flight Facility Accomack County, Virginia. April.

USACE, 2005. United States Army Corps of Engineers. Archive Search Report for NASA - Wallops Flight Facility Accomack County, Virginia. October.

USACE, 2012. United States Army Corps of Engineers. Site Inspection Report for Wallops Flight Facility Project 03, Accomack County, Virginia. March.

USACE, 2012a. United States Army Corps of Engineers. Site Inspection Report for Wallops Flight Facility Project 04, Accomack County, Virginia. March.

USACE, 2012b. United States Army Corps of Engineers. Site Inspection Report for Wallops Flight Facility Project 05, Accomack County, Virginia. March.

USACE, 2012c. United States Army Corps of Engineers. Final Site Inspection Report Site Inspection of Project 08 HTRW – Boat Basin Area NASA Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia. July.

USACE, 2012d. United States Army Corps of Engineers. Final Site Inspection Report Wallops Flight Facility Main Base Ranges (Skeet Range), Accomack County, Virginia. August.

USACE, 2012e. United States Army Corps of Engineers. Final Remedial Investigation, Site 9 Drum Disposal Area Wallops Flight Facility, Virginia. November.

USACE, 2012f. United States Army Corps of Engineers. Final Site Inspection Report Site Investigation of Five Formerly Used Defense Sites, project 15 NASA Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia. November.

USACE, 2013. United States Army Corps of Engineers. Revision 4 - Final Remedial Investigation, Sites 14 and 15 Wallops Flight Facility, Virginia. March.

USACE, 2015. United States Army Corps of Engineers. Final Focused Feasibility Study report Project 15 – Active Remediation Projects Former Wastewater Treatment Plant Wallops Flight Facility Formerly Used Defense Site Wallops Island, Virginia. May.

Versar, 2000. Unpublished sampling records, logs, and figures.

Versar, 2000a. Risk Assessment Update Former Fire Training Area. Goddard Space Flight Center, Wallops Flight Facility, Wallops Island, VA. March.

Versar, 2001. Remedial Investigation/Feasibility Study Sites 5 and 12 Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia. December.

Versar, 2001a. Site Investigation Report ADAS Facility Site 10 Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia. July.

Versar, 2001b. Remedial Investigation/Feasibility Study Site 16 Waste Oil Dump Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia. March.

Weiss and Associates, 2002. Final Sampling and Analysis Plan and Radiological Field Survey for the N-222 Scrapyard Area NASA Goddard Space Flight Center Wallops Flight Facility. October.

Weiss and Associates, 2003. Soil Sampling and Radiological Field Survey Data Gaps Report for the N-222 Scrapyard Area NASA Wallops Flight Facility Wallops Island, Virginia. January.

Weiss and Associates, 2003a. Removal Action Work Plan for the N-222 Scrapyard Area NASA Goddard Space Flight Center Wallops Flight Facility. March.

Weiss and Associates, 2004. Groundwater Characterization Work Plan for the N-222 Scrapyard Area NASA Goddard Space Flight Center Wallops Flight Facility. November.

Weiss and Associates, 2005. Polychlorinated Biphenyls Data Gaps Investigation Work Plan for Sites 5 and 12 NASA Goddard Space Flight Center Wallops Flight Facility. August.

Weiss and Associates, 2005a. Groundwater Characterization Report for N-222 Scrapyard Area NASA Goddard Space Flight Center Wallops Flight Facility. December.

Weiss and Associates, 2008. Sites 005 and 012 Remedial Investigation Report Revision I, for Sites 005 and 012 NASA Goddard Space Flight Center Wallops Flight Facility. June.

TABLES

## TABLE 2-1 AREAS OF CONCERN NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN PAGE 1 of 2

AOC NO. <sup>(1)</sup>	AOC <sup>(2)</sup> NAME	LOCATION <sup>(3)</sup>	CURRENT STATUS <sup>(4)</sup> / ALIAS
1	Old Wastewater Treatment Plant	MB	Deferred to FUDS Program / Site 1 (FUDS Project 13).
2	Maintenance Facility	МВ	Closed Out under this AAOC/ Building E-52, Site 2.
3	Two 600,000-Gallon Fuel Tanks	МВ	Deferred to FUDS Program / Buildings A46-A and A46-B.
4	Debris Pile	WI	Closed Out under this AAOC/ Island Debris Pile - North End, Site 4.
5	Paint Stain	WI	Closed Out under this AAOC / Paint Spray Booth, Site 5.
6	Former Island Fueling System	WI	Deferred to UST Programs / Site 6.
7	Transformer Pads	MB, ML, WI	Closed Out under this AAOC / Site 7.
8	Former Main Base Fueling System	MB	Deferred to UST Program / Site 8.
9	Abandoned Drum Dump	MB	Deferred to FUDS Program / Site 9 (FUDS Project 15).
10	Advanced Data Acquisition Support Facility	МВ	Closed Out under CERCLA / Site 10, ADAS.
11	Transformer Storage Areas	MB, WI	Closed Out under this AAOC / Site 11.
12	Former Wind Tunnel	WI	Closed Out under this AAOC / Site 12.
13	Ordnance Disposal Area	MB	Deferred to FUDS Program / Boat Basin, Site 13 (FUDS MMRP Project 07).
14	Debris Pile	MB	Deferred to FUDS Program / Site 14 (FUDS Project 15).
15	Debris Pile	MB	Deferred to FUDS Program / Site 15 (FUDS Project 15).
	Waste Oil Dump	МВ	Remedial Action Complete; Long-Term Monitoring / Site 16, Pits at end of Runway 17-35.
	Old Aviation Fuel Tank Farm	MB	Deferred to UST Program.

### TABLE 2-1 AREAS OF CONCERN NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN PAGE 2 of 2

AOC NO. <sup>(1)</sup>	AOC <sup>(2)</sup> NAME	LOCATION <sup>(3)</sup>	CURRENT STATUS <sup>(4)</sup> / ALIAS
	Scrapyard	MB	Closed Out under this AAOC / Building N-222.
	PCB Transformer Pad	MB	Closed Out under TSCA and CERCLA / N-161C.
	Photographic Tank	MB	Closed Out under this AAOC/ M-15 Photo Tank, Building M-15.
	Former Fire Training Area	MB	Remedial Action Complete; Long-Term Monitoring.
	Industrial/Sanitary Landfill	MB	Deferred to FUDS Program.
	Construction Debris Landfill	MB	Deferred to FUDS Program (FUDS Project 15).
	Pistol/Rifle Range	MB	Closed out under this AAOC.
	South End Disposal Area (SEDA)	WI	Closed Out under this AAOC.
	Area of Interest – 20 Transformer (AI-20)	WI	Closed Out under this AAOC.
	North Island Transformer	wi	Closed Out under this AAOC
	F-10A/F-10B – Paint Locker and Battery Shop	MB	Under investigation.
	N-166 – Alcohol Storage Building	MB	Under investigation.

(1) Blank indicates no number was assigned.

(2) Area of Concern (AOC)

(3) Refers to the land parcel where the AOC is located; Main Base (MB); Main Land (ML); Wallops Island (WI).

(4) The following abbreviations are used to describe Current Status: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Formerly Utilized Defense Sites (FUDS); Toxic Substance Control Act (TSCA).

Former Circular Area and Per-and Polyfluorinated Alkyl Substance (PFAS) sampling are included in this SMP, but are not considered AOCs.

A bolded and shaded entry indicates that the AOC is considered a Site and is being pursued for further response actions under this SMP or AAOC. *Italicized entry indicates that the AOC has been closed under the AAOC.* 

## TABLE 4-1SUMMARY OF FINDINGSMAINTENANCE FACILITY (SITE 2)NASA WALLOPS FLIGHT FACILITYFY'20 - '21 SITE MANAGEMENT PLAN

Objective	Determine if a release from past operations/practices has occurred and migrated to soils and groundwater. Conduct a screening of risks to determine if site poses a risk.
Source of Contamination	Past operations.
Investigations Completed: Media, and Analytical Parameters	<u>SI/Supplemental SI:</u> Soil: TCL Organics and TAL metals. Groundwater: TCL Organics and TAL metals.
Nature and Extent of Contamination	Soils: PAH, metals, and pesticide concentrations exceed RBCs. Contaminant pattern suggests that levels of concern are limited to a discrete subsurface area associated with former roadbed. <u>Groundwater</u> : No contaminants of concern.
Recommended Remedial Response	Site has been closed with a No Further Action (NFA) determination documented in a Concurrence Statement issued with the Final Supplemental SI report.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

## TABLE 4-2 SUMMARY OF FINDINGS <u>ISLAND DEBRIS PILE (SITE 4)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Site contained debris and refuse from Navy and NASA operations. Debris was removed and SI determined that residual contaminant levels presented an unacceptable human health risk. Mitigate potential risks.
Source of Contamination	Past operations/disposal practices. Debris and refuse present at the site were characterized and cleared from the site to allow further investigations to be conducted. Residual contamination in surface soils was addressed through a removal action.
Investigations Completed: Media, and Analytical Parameters	<u>SI:</u> Soil: TCL Organics and TAL metals. <u>Waste Characterization:</u> Debris Material and Soil: TCL Organics and TAL Metals, Asbestos, and TCLP analysis. <u>Supplemental SI:</u> Soil, sediment, and groundwater: TCL Organics and TAL metals <u>Post-Removal Sampling:</u> Soil: Specific PAHs
Nature and Extent of Contamination	Soils:         Metals similar to background levels; PAHs above risk-based screening levels; one PCB sample detection above risk-based screening level.         Debris and Soils:         Petroleum-related compounds, VOCs, PCBs, and metals in soils. Asbestos in discrete debris material only.         Groundwater:         Metals present above human-health screening levels but similar to background levels.
Recommended Remedial Response	Debris removal and Non-Time Critical Removal Action completed; Site has been closed with a No Further Action (NFA) determination documented in a Concurrence Statement issued with the Final Construction Completion Report.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RI=Remedial Investigation SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds RBC=Risk Based Concentration ROD = Record of Decision

#### TABLE 4-3 SUMMARY OF FINDINGS <u>PAINT STAIN (SITE 5)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Implement a final remedy to mitigate human health and ecological risks defined in the ROD.
Source of Contamination	Past operations.
Investigations Completed: Media, and Analytical Parameters	SI:         Soil, Groundwater, and Sediments: TCL Organics and TAL metals.         Removal Action:         Soil: PAHs.         RI:         Soil, Groundwater, Sediment, Surface Water, and Tissue: TCL Organics, TAL metals, and toxicity testing.         Supplemental RI Sampling:         Soil, sediment, sludge, and concrete: PCBs.         TSCA Action:         Soil; PCBs
Nature and Extent of Contamination	Soils and Sediments:         Metals, pesticides, PAHs, and PCBs above RBCs and ESV.         Surface Water:         Contaminant levels below AWQCs.         Groundwater:         No contaminant of concern.         Note:         Removal action for PAH contaminated soils complete. TSCA removal of former transformer pad and soils at Building X-115 complete.         Metals, PAHs, and PCBs in soil/sediments present unacceptable risk.
Recommended Remedial Response	Site has been closed. Final remedy identified in ROD (excavation and off-site disposal) was completed and documented in a RACR. EPA issued a Certificate of Completion under AAOC. Note: Actions included final action for residual PCB contamination associated with the transformer pad at Building X-115.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=Polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RACR = Remedial Action Completion Report RBC=Risk Based ConcentrationTRI= Remedial InvestigationNROD = Record of DecisionNSI= Site InspectionSVOC= Semivolatile organic compoundsTAL=Target Analyte ListTCL=Target Compound List

TPH=Total petroleum hydrocarbons VOC=Volatile organic compounds

## TABLE 4-4SUMMARY OF FINDINGS<u>TRANSFORMER PADS (SITE 7)</u>NASA WALLOPS FLIGHT FACILITYFY'20 - '21 SITE MANAGEMENT PLAN

Objective	Determine if further response actions are required at former transformer pad locations.
Source of Contamination	Past use of electrical transformers containing PCB dielectric fluids.
Investigations Completed: Media, and Analytical Parameters	<u>SI:</u> Soil: PCBs. Surface Wipes: PCBs
Nature and Extent of Contamination	<u>Soils</u> : PCBs below regulatory action levels. <u>Wipe samples:</u> PCBs below regulatory action levels and/or appropriate response actions taken.
Recommended Remedial Response	Site has been closed out through a No Further Action Decision Document. Note: Building X-115 to be addressed under CERCLA response actions taken at Sites 5 and 12.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

## TABLE 4-5 SUMMARY OF FINDINGS <u>TRANSFORMER STORAGE AREAS (SITE 11)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Determine if further response actions are required at former transformer storage locations.
Source of Contamination	Past temporary storage of out-of-use electrical transformers containing PCB dielectric fluids.
Investigations Completed: Media, and Analytical Parameters	<u>SI:</u> Soil: PCBs. Surface Wipes: PCBs
Nature and Extent of Contamination	Soils: PCBs below regulatory action levels. <u>Wipe samples:</u> PCBs below regulatory action levels.
Recommended Remedial Response	Site closed out through a No Further Action Decision Document.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

#### TABLE 4-6 SUMMARY OF FINDINGS <u>FORMER WIND TUNNEL (SITE12)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Implement a final remedy to mitigate human health and ecological risks defined in the ROD.	
Source of Contamination	Past operations.	
Investigations Completed: Media, and Analytical Parameters	SI:         Soil, Groundwater, and Sediments: TCL Organics and TAL metals. <u>Removal Action</u> :         Soil: PAHs. <u>RI:</u> Soil, Groundwater, Sediment, Surface Water, and Tissue: TCL Organics, TAL metals, and toxicity testing. <u>Supplemental Sampling:</u> Soil, sediment, sludge, and concrete. <u>TSCA Action:</u> Soils; PCBs	
Nature and Extent of Contamination	Soils and Sediments:         Metals, pesticides, PAHs, and PCBs above RBCs and ESV.         Surface Water:         Contaminant levels below AWQCs.         Groundwater:         No contaminant of concern         Note:         Removal action for PAH contaminated soils complete. TSCA removal of former transformer pad and soils at Building X-115 complete.         Metals, PAHs and PCBs in soil/ sediments present an unacceptable risk.	
Recommended Remedial Response	Site has been closed. Final remedy identified in ROD (excavation and off-site disposal) was completed and documented in a RACR. EPA issued a Certificate of Completion under AAOC. Note: Actions included final action for residual PCB contamination associated with the transformer pad at Building X-115.	

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=Polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RACR = Remedial Action Completion Report RBC=Risk Based ConcentrationTPH=Total petroleum hydrocarbonsRI= Remedial InvestigationVOC=Volatile organic compoundsROD = Record of DecisionVOC=Volatile organic compoundsSI= Site InspectionSVOC= Semivolatile organic compoundsTAL=Target Analyte ListTCL=Target Compound List

#### TABLE 4-7 SUMMARY OF FINDINGS <u>WASTE OIL DUMP</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Implement a final remedy to mitigate human health risks as defined in the ROD.
Source of Contamination	Past surface and subsurface disposal of waste oils and flammable liquids.
Investigations Completed: Media, and Analytical Parameters	SI:         Soil, Groundwater, and Sediments: TCL Organics, TAL metals, and TPH. <u>RI:</u> Soil, Groundwater, and Sediment: TCL Organics, TAL metals, and TPH. <u>Supplemental RI:</u> Soil, Groundwater, and Sediment: TCL Organics and TAL metals. <u>Pilot Study:</u> Groundwater: Target VOCs and Metals <u>Remedial Action and Long-Term Monitoring:</u> Groundwater: Target Organics and metals.
Nature and Extent of Contamination	<u>Soils</u> : No unacceptable risks to human health or the environment. <u>Groundwater:</u> Solvent and petroleum-related contaminant levels exceed RBCs and present an unacceptable risk to human health under residential scenario. Cleanup goals established.
Recommended Remedial Response	Final remedy (biostimulation, institutional controls and monitoring) documented in ROD has been implemented. Long-term monitoring and reporting and 5-Year Report generation is ongoing.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value ORC=Oxygen Reducing Compound TPH=total petroleum hydrocarbons VOC=volatile organic compounds PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons

# TABLE 4-8SUMMARY OF FINDINGSSCRAPYARD (N-222)NASA WALLOPS FLIGHT FACILITYFY'20 - '21 SITE MANAGEMENT PLAN

Objective	Determine if a release to groundwater has occurred and determine the need for further site actions.
Source of Contamination	Past operations.
Investigations Completed: Media, and Analytical Parameters	SI:         Soil: TCL Organics, TAL metals, and TPH. <u>RI:</u> Soil: TCL Organics, TAL metals, and Radioisotopes.         Supplemental Removal Investigations:         Soil: PCBs and Radioisotopes.         Post-Removal Sampling:         Soil: PCBs and Radioisotopes.         Groundwater Investigation:         Groundwater: TCL Organics and TAL Metals.         Data Assessment and Risk Evaluation:         No sampling.         Tabulated existing historical data and conducted a risk evaluation for all media.
Nature and Extent of Contamination	Soils:         PCB and Radioisotope soils contaminated above Clean-Up Goals have been removed from the site. No unacceptable site-related risks.         Groundwater:         Low-level VOCs in groundwater similar to background levels. No unacceptable site-related risks.
Recommended Remedial Response	Site has been closed with a No Further Action (NFA) decision documented in a ROD.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds ROD = Record of Decision SI= Site Inspection

#### TABLE 4-9 SUMMARY OF FINDINGS <u>PHOTOGRAPHIC TANK (M-15)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Characterize ecological risks posed by the site and determine the appropriate remedial response.
Source of Contamination	Former wastewater processing tank and drain field.
Investigations Completed: Media, and Analytical Parameters	Sl:         Soil, Surface water, and Sediment: TCL Organics, TAL metals, and TPH.         Tank content: RCRA waste characterization.         Supplemental Sl:         Soil, Surface water, Groundwater, and Sediment: TCL Organics, and TAL metals.         Tank content: RCRA waste characterization, TCL Organics, and TAL metals.         Focused Ecological Investigation:         Soil and Sediment: Select metals and ecological testing.         Additional focused Ecological sampling:         Soil and sediment: Select metals and toxicity testing.
Nature and Extent of Contamination	Soils and Sediments: Metals present at levels above ESVs but site-specific toxicity testing and contaminant distribution indicates a low probability of ecological risks above background levels. Note: Tank content found to be non-hazardous. No release to groundwater. No unacceptable human health risks associated with soils, surface water or sediments.
Recommended Remedial Response	Site closed through a No Action Decision Document.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

## TABLE 4-10 SUMMARY OF FINDINGS <u>FORMER FIRE TRAINING AREA</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Implement a final remedy to mitigate human health risks as defined in the ROD.
Source of Contamination	Past fire fighting training exercises.
Investigations Completed: Media, and Analytical Parameters	Sl:         Soil and Groundwater: TCL Organics, TAL metals, and TPH. <u>Rl:</u> Soil and Groundwater: TCL Organics, TAL metals, and TPH. <u>Supplemental Rl:</u> Soil and Groundwater: TCL Organics and TAL metals. <u>Pilot Study:</u> Groundwater: Target VOCs, SVOCs and metals <u>Supplemental Groundwater Sampling:</u> Groundwater: Target VOCs, SVOCs and metals <u>Remedial Action and Long-Term Monitoring:</u> Groundwater: Target organics and metals <u>Five Year Review Monitoring:</u> Groundwater:         Per- and polyfluorinated alkyl substances (PFAS)
Nature and Extent of Contamination	<u>Soils</u> : A facility-wide PFAS Site Investigation conducted in 2019 indicated PFAS levels in soil exceeding screening levels <u>Groundwater:</u> Solvent and petroleum-related contaminant levels exceed RBCs and present an unacceptable risk to human health under the residential scenario. Cleanup goals established. PFAS levels exceed the EPA Lifetime Health Advisory; a facility-wide PFAS Site Investigation, that includes FFTA, was conducted in 2019.
Recommended Remedial Response	Final remedy (biostimulation, institutional controls and monitoring) documented in ROD has been implemented. Long-term monitoring and reporting is ongoing. Per- and polyfluorinated alkyl substances (PFAS) sampling completed as required in the five-year review.

## TABLE 4-10 SUMMARY OF FINDINGS <u>FORMER FIRE TRAINING AREA</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

## TABLE 4-11 SUMMARY OF FINDINGS <u>PISTOL/RIFLE RANGE</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Evaluate risks from metals, PAHs, and explosives identified in SI and develop/implement removal or remedial actions to reach site closure.
Source of Contamination	Current and past small arms firing range.
Investigations Completed: Media, and Analytical Parameters	<u>SI:</u> Soil, sediment, and groundwater: TCL Organics, TAL metals, explosives, and perchlorate. <u>Supplemental Sampling:</u> Soil: Explosives and metals
Nature and Extent of Contamination	Soils: Target areas at pistol and rifle range contain metals above residential and ecological risk-based screening levels. Skeet range soils contain lead shot and lead and PAH concentrations present a potential risk to residential users and ecological receptors. <u>Sediment:</u> Sediment/soil downgradient from the skeet range contains lead above residential action levels. <u>Groundwater:</u> No unacceptable risk to human health or the environment. Note: Surface water not present at the site.
Recommended Remedial Response	Conducted a NTCRA to reach site closure for Pistol/Rifle Ranges. Site has been closed with a No Further Action (NFA) determination documented in a Consensus Statement. NOTE: Skeet Range identified as a FUD Site and not addressed under this AAOC.

AWQC=Ambient Water Quality Criteria BNA=base neutral acid extractable organic compounds ESV=Ecological Screening Value PCB=polychlorinated biphenyls PAH = Polynuclear Aromatic Hydrocarbons PRAP = Proposed Remedial Action Plan RBC=Risk Based Concentration RI=Remedial Investigation ROD = Record of Decision SI= Site Inspection SVOC=semivolatile organic compounds TAL=Target Analyte List TCL=Target Compound List TPH=total petroleum hydrocarbons VOC=volatile organic compounds

NTCRA = Non-Time Critical Removal Action

## TABLE 4-12 SUMMARY OF FINDINGS SOUTH END DISPOSAL AREA NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Evaluate and respond to MEC risk. Determine if MC is present and conduct a screening to determine if site poses an unacceptable risk.
Source of Contamination	Miscellaneous debris and military MEC deposition.
Investigations Completed: Media, and Analytical Parameters	Limited Response Action: No sampling; excavated debris pile, recovered discarded military munitions and inspected other debris. Preliminary Assessment: No sampling. Site Screening/Sampling: Soil and Groundwater/water table: TCL Organics, TAL metals, and perchlorate.
Nature and Extent of Contamination	No unacceptable risks to human health or the environment.
Recommended Remedial Response	Conducted response action to remove MEC from site. Site has been closed with a No Further Action (NFA) determination documented in a Concurrence Statement issued with the Final Site Screening report.

MEC= Munitions and Explosive Concern. MC = Munitions Constituents

## **TABLE 4-13** SUMMARY OF FINDINGS AREA OF INTEREST 20 (AI-20) NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Characterize contamination at AI-20 and develop and implement a removal/remedial action to reach site closure.
Source of Contamination	Leakage from pole-mounted transformer.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment:
	No sampling.
	Limited site assessment:
	Two composite soil samples.
	Site Screening/Sampling:
	Surface and subsurface soil and pole: PCB.
	Removal Sampling
	Surface and subsurface soil, pole, and groundwater: PCB
Nature and Extent of Contamination	Unacceptable human health and ecological risks presented by PCB concentrations in soils and pole. No unacceptable risks associated with groundwater.
Recommended Remedial Response	Contamination and risk has been addressed through a TCRA; Site has been closed with a No Further Action (NFA) determination documented in a Concurrence Statement issued with the Final Construction Completion Report.

PCB=Polychlorinated biphenyls TCRA = Time-Critical Removal Action

## TABLE 4-14 SUMMARY OF FINDINGS <u>NORTH ISLAND TRANSFORMERS</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Complete site screening to determine if releases have occurred. Characterize site contamination where appropriate and implement a corrective action as necessary to achieve site closure.
Source of Contamination	Leakage from pole-mounted transformers.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment:         No sampling.         Site Screening/Sampling:         Surface soil: PCB.         Supplemental Sampling/Characterization:         Surface and subsurface soil and pole: PCB.         Groundwater NIT-17: PCB
Nature and Extent of Contamination	Unacceptable human health and ecological risks at NIT-1 and-17; Transformers present at NIT-7 and -14; Additional screening to determine conditions at NIT-2, -3, -4, -5, -6, -8, -12, -13, and -16; No Further Action (NFA) at remainder of NIT locations.
Recommended Remedial Response	Characterization and screening completed. NFA Decision for NIT -2, -3, -4, -5, -6, -8, -9, -10, -11, -12, - 13, -15, and -16 documented in a Consensus Document. TCRA completed to address contamination and risks at NIT-1, -7, -14, and -17; these NITs have been closed with a No Further Action (NFA) determination documented in a Consensus Statement. Therefore, no further action is required for this AOC.

PCB=Polychlorinated biphenyls NFA = No Further Action TCRA = Time-Critical Removal Action

# TABLE 4-15SUMMARY OF FINDINGSSTUCTURES F-10A/F-10BNASA WALLOPS FLIGHT FACILITYFY'20 - '21 SITE MANAGEMENT PLAN

Objective	Complete site screening to determine if releases have occurred. Characterize site contamination where appropriate and implement a corrective action as necessary to achieve site closure.
Source of Contamination	Spills associated with past operations.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment: No sampling. <u>Site Screening/Sampling:</u> Resolution of regulatory comments is on-going.
Nature and Extent of Contamination	To be determined.
Recommended Remedial Response	To be determined.

# TABLE 4-16SUMMARY OF FINDINGSSTRUCTURE N-166NASA WALLOPS FLIGHT FACILITYFY'20 - '21 SITE MANAGEMENT PLAN

Objective	Complete site screening to determine if releases have occurred. Characterize site contamination where appropriate and implement a corrective action as necessary to achieve site closure.
Source of Contamination	Spills associated with past operations.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment: No sampling. <u>Site Screening/Sampling:</u> Resolution of regulatory comments is on-going.
Nature and Extent of Contamination	To be determined.
Recommended Remedial Response	To be determined.

## TABLE 4-17 SUMMARY OF FINDINGS <u>FORMER CIRCULAR AREA (FCA)</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Complete site screening to determine if releases have occurred. Characterize site contamination where appropriate and implement a corrective action as necessary to achieve site closure.
Source of Contamination	Releases associated with past disposal operations.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment: No sampling. <u>Site Screening/Sampling:</u> Resolution of regulatory comments is on-going.
Nature and Extent of Contamination	To be determined.
Recommended Remedial Response	To be determined.

### TABLE 4-18 SUMMARY OF FINDINGS <u>PER- AND POLY-FLUORINATED ALKYL SUBSTANCES (PFAS) SAMPLING</u> NASA WALLOPS FLIGHT FACILITY FY'20 - '21 SITE MANAGEMENT PLAN

Objective	Complete site screening to determine if releases have occurred. Characterize site contamination where appropriate and implement a corrective action as necessary to achieve site closure.
Source of Contamination	Releases associated with past operations.
Investigations Completed: Media, and Analytical Parameters	Preliminary Assessment:         Preliminary Assessment Report (included with Site Investigation Work Plan) was approved in April 2019.         Site Screening/Sampling:         Site Investigation field work is complete; the Draft Site Investigation Report will be submitted in December         2019. Perimeter monitoring wells have been installed and sampled. Regular sampling of Wallops Flight         Facility and Town of Chincoteague drinking water wells and finished water is occurring.
Nature and Extent of Contamination	To be determined.
Recommended Remedial Response	To be determined.

## TABLE 5-1SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021MAINTENANCE FACILITY, SITE 2NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	SUBMITTAL DATE	COMMENT
Final SSI Work Plan	11/19/04	
Draft SSI Report	11/11/05	
Response to Comments	04/27/06	Comments on the draft report received 03/14/06.
Draft Final SSI Report	07/12/06	Resolution of comments reached 6/15/06 and a Draft Final was issued to document the NFA Decision.
Decision Document and Final SSI Report	09/11/06	The Final SI Report and Consensus Statement documenting a NFA Decision was signed 08/15/06. Copies were distributed 09/11/06.

NO FURTHER ACTION IS REQUIRED FOR THIS SITE.

# TABLE 5-2SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021ISLAND DEBRIS PILE, SITE 4NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft BMP Work Plan	06/09/06	
Response to Comments	08/23/06	Comments on the draft Work Plan received 07/21/06.
Final BMP Work Plan	09/18/06	Resolution of comments reached 09/06/06.
Draft SI Work Plan and BMP Report	06/25/07	BMP field work completed 02/23/07.
Response to Comments	10/17/07	Comments received 10/4/07.
Final SI Work Plan	01/31/08	EPA approval received 3/13/08.
Draft SI Report	12/01/08	Field activities completed 4/22/08 and 07/17/08.
Response to Comments	03/20/09	Comments received 02/23/09
Final SI Report	04/20/09	Resolution of comments reached 03/31/09
Draft Technical Memorandum	05/19/09	Comments resolved 07/21/09
Draft EE/CA	10/30/09	Comments received 1/4/10
Response to Comments	2/4/2010	Comments resolved 02/09/10
Final EE/CA	2/18/2010	EPA approval received 3/2/2010
Action Memorandum	4/16/2010	Public comment period 2/17/10 – 3/17/10. No comments received.
Draft RA Work Plan	4/12/2010	EE/CA comments received 6/30/2010
Response to Comments	7/2/10	Comments resolved 7/8/10

# TABLE 5-2SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021ISLAND DEBRIS PILE, SITE 4NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLANCont.

SUBMITTAL	DUE DATE	COMMENT
Final RA Work Plan	7/21/2010	EPA approval received 11/30/10
Draft Construction Completion Report	8/30/11	Removal field work completed 6/8/11
Response to Comments	11/2/11	Comments received 10/19/11
Final Construction Completion Report and Decision Document	1/11/12	The NFA Concurrence Statement was signed 1/30/12, incorporated into the final Construction Completion Report (dated December 2011), and distributed 2/28/12.

NO FURTHER ACTION IS REQUIRED FOR THIS SITE.

# TABLE 5-3SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PAINT STAIN AND FORMER WIND TUNNEL, SITES 5 and 12NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Supplemental RI Work Plan	02/14/05	
Response to comments	07/08/05	
Final Supplemental RI Work Plan	08/11/05	
Draft RI Report	07/12/06	Field work completed 11/15/05.
Response to Comments	01/12/07 through 01/02/08	Initial comments received 11/17/06. Comments resolution extended through December 2007.
Final RI Report	06/01/08	Final RI submitted 2/20/08. Comments received 3/24/08. Responses submitted 4/25/08.
Draft FS Report	11/03/08	Assumes 4/25/08 responses represent final RI.
Response to Comments	3/23/09 – 08/25/09	Initial comments received 01/20/09. Comment resolution extended through 08/25/09.
Final FS Report	09/22/09	30 days after comment resolution.
Draft PRAP	09/30/09	Prepared concurrent to Final FS. FS approval received 09/24/09.
Response to Comments	1/12/10	Comments received 12/15/09.
Final PRAP	3/15/10	
Draft ROD	3/4/10	Comments received 5/20/10
Response to Comments	6/7/10	Comments resolved 7/8/10
Draft Final ROD	7/16/10	Additional comments received 7/22/10 and resolved 8/25/10
Final ROD	9/7/10	Additional comments received in N0vember 2010
Revised Final ROD	2/17/11	Additional comments received 8/30/11
FINAL ROD	10/28/11	Comments resolved 10/3/11, DEQ concurred in November and EPA signed and issued the final ROD in December 2011.
Draft RD Work Plan	12/14/11	

# TABLE 5-3SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PAINT STAIN AND FORMER WIND TUNNEL, SITES 5 and 12NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLANCont.

SUBMITTAL	DUE DATE	COMMENT
Response to Comments	2/28/12	Comments on Draft RD Work Plan received 1/31/12.
Final RD Work Plan	3/22/12	Comment resolved 3/13/12.
Draft Wetland Delineation Report	5/30/12	
Final Wetland Delineation Report	9/5/12	Comments on draft received 6/18/12 and resolved 8/7/12.
Draft RD/RA Work Plan	9/5/12	Results of PDI sampling and the final wetland delineation report included in work plan.
Response to Comments	1/7/13	Comments received 12/13/13.
Final RA Work Plan	2/5/13	Comments resolved 1/8/13.
Draft RA Completion Report	1/13/14	Delayed due to field findings and receipt of disposal records
Response to Comments	6/2/14	Comments received 5/19/14.
Final RA Completion Report	6/10/14	Comments resolved 6/3/14.
Certificate of Completion	6/5/14	Issued by EPA.

NO FURTHER ACTION IS REQUIRED FOR THESE SITES.

## TABLE 5-4SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021TRANSFORMER PADS AND STORAGE AREAS, SITES 7 and 11NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Final Decision Document	01/07/05	Comments resolved 12/21/04.
Final Decision Document Approved/Signed	02/17/05	No further actions planned.

### NO FURTHER ACTION IS REQUIRED FOR THESE SITES.

SUBMITTAL	DUE DATE	COMMENT
Draft FS	04/26/05	
Response to Comments	08/11/05	
Final FS Report	10/11/05	
Draft PRAP	03/29/06	Per the FY'06 SMP submittal of the draft PRAP was delayed awaiting comments on the draft FFTA PRAP.
Response to Comments	09/11/06	Comments received 08/23/06.
Final PRAP	09/28/06	Comments resolved during meeting on 09/11/06.
Draft ROD	09/18/07	The public comment period extended from mid-February to mid- March. Preparation of the Draft ROD was delayed, per agreement between EPA and NASA, pending resolution of EPA comments on the FFTA ROD.
Response to Comments	11/28/07	Comments received 11/02/07.
Final ROD	01/31/08	Comments resolved 01/08/08.
Draft Pilot Study Work Plan and LUC Design	07/31/08	Per EPA/NASA agreement, a Pilot Study Work Plan will be submitted. Approval of ROD received 4/30/08.
Response to Comments	09/29/08	Comments anticipated 60 days after submittal of draft Work Plan.
Final Pilot Study Work Plan and LUC Design	11/3/08	Resolution of comments anticipated 30 days after submittal of response to comments.
Draft RA Work Plan Work Plan	03/26/09	Pilot study field work conducted 12/08/08 through 01/16/09.
Response to Comments	07/21/09	Comments received 06/10/09.
Final RA Work Plan	09/29/09	Comment Resolution reached 08/26/09.

SUBMITTAL	DUE DATE	COMMENT
Draft LTM Plan	05/04/09	
Response to Comments	09/02/09	Comments received 08/28/09.
Final LTM Plan	10/14/09	Comment resolution reached 10/01/09.
Post-Injection Groundwater Sampling	3/15/10	
Draft RA Completion Report	6/8/2010	
Response to Comments	1/24/11	Comments received 12/13/10.
Final RA Completion Report	4/6/11	Comment resolution reached 3/31/11.
Quarterly Sampling Report	8/18/10	
Quarterly Sampling Report	12/10/10	
Draft CY'10 Annual Groundwater Report	3/17/11	90 days after completion of field work.
Response to Comments	10/19/11	Comments received 9/28/11.
Final CY'10 Annual Groundwater Report	11/21/11	Comments resolved 11/7/11.
Semi-Annual Sampling Report	6/22/11	Semi-annual sampling conducted 3/23/11
Draft CY'11 Annual Groundwater Summary Report	12/14/11	Sampling conducted 9/16/11
Response to Comments	5/16/12	Comments received 3/20/12
Final CY'11 Annual Groundwater Report	8/15/12	Comments resolved 8/14/12

SUBMITTAL	DUE DATE	COMMENT
Semi-Annual Sampling Report	5/22/12	Sampling completed 3/16/12
Draft Long-Term Monitoring Plan –Revision 1	8/2/12	
Final Long-Term Monitoring Plan –Revision 1	9/14/12	Draft accepted as final with no changes
Draft CY'12 Annual Groundwater Summary Report	12/13/12	Field work completed 9/20/12
Response to Comments	4/24/13	Comments received 4/22/13
Final CY'12 Annual Groundwater Summary Report	6/10/13	Comments resolved 5/20/13
Semi-Annual Sampling Report	7/11/13	Field sampling 3/20/13
Draft Five-Year Review Report	6/10/13	
Response to Comments	11/20/13	Received comments 11/1/13
Final Five-Year Review Report	2/4/14	Comments resolved 1/8/14
EPA Concurrence/Approval	3/6/14	
Draft CY'13 Annual Groundwater Summary Report	12/11/13	Field sampling 9/7/13
Response to Comments	2/12/14	Comments received 1/22/14
Final CY'13 Annual Groundwater Summary Report	2/12/14	Comments did not require responses/resolution; editorial only.
Long-Term Monitoring Plan – Rev2	2/28/14	
Semi-Annual Sampling Report	6/10/14	Field sampling 3/20/14
Draft CY'14 Annual Groundwater Summary Report	12/17/14	Field sampling 9/22/14
Response to Comments	2/5/15	Received comments 1/21/15

SUBMITTAL	DUE DATE	COMMENT
Final CY'14 Annual Groundwater Summary Report	4/21/15	Comments resolved 4/7/15
Semi-Annual Sampling Report	5/27/15	Field sampling 3/27/15
Draft Long-Term Monitoring Plan Rev 3	7/27/15	
Response to Comments	8/27/15	EPA no comments; DEQ comments received 8/25/15
Final Long-Term Monitoring Plan Rev 3	9/21/15	Comments resolved 9/15/15
Draft CY'15 Annual Groundwater Summary Report	12/8/15	Field sampling 9/23/15
Response to Comments	3/9/16	DEQ comments 1/20/16; EPA comments 2/22/16
Final CY'15 Annual Groundwater Summary Report	4/22/16	Comments resolved 4/14/16
Semi-Annual Sampling Report	6/22/16	Field sampling 4/12/16
Draft CY'16 Annual Groundwater Summary Report	1/3/17	Field sampling completed 9/26/16
Response to Comments	2/6/17	Regulator comments received on 2/2/17
Final CY'16 Annual Groundwater Summary Report	2/6/17	Sampling frequency reduced to once per 18 months
Draft CY'17 Annual Groundwater Summary Report	2/1/18	Field sampling completed October 2017
Response to Comments	3/13/18	Receipt of comments 2/22/18 (EPA) and 2/28/18 (DEQ)
Final CY'17 Annual Groundwater Summary Report	3/13/18	

SUBMITTAL	DUE DATE	COMMENT
Draft Five-Year Review	10/2/18	
Response to Comments	12/10/18	Comments received 10/11/18 (DEQ) and 11/30/18 (EPA)
Final Five-Year Review	02/18/19	
Public Notice	03/20,21/19	
Draft CY'20 Annual Groundwater Summary Report		Field sampling to be completed in Spring 2020; draft submitted 90 days after field event
Response to Comments	45 days after receipt of comments	Receipt of comments anticipated 60 days after draft
Final CY'20 Annual Groundwater Summary Report	30 days after resolution of comments	Resolution anticipated 30 days after response to comments

# TABLE 5-6SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021SCRAPYARD SITE (N-222)NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Final GW Characterization Work Plan	11/17/04	
Draft GW Report	09/12/05	
Response to Comments	11/3/05	
Final GW Report	12/15/05	Resolution of comments reached 11/14/05.
Draft Site Summary (SS) Report	05/08/06	EPA approval of GW report received 1/12/06.
Response to Comments	08/03/06	Comments received 7/27/06.
Final SS Report	08/15/06	Resolution of comments reached 08/03/06.
Draft PRAP	10/31/06	EPA approval of Final SS Report received 10/02/06.
Response to Comments	12/21/07	Comments received 12/19/07.
Final PRAP	01/11/07	Resolution of comments reached 01/10/07.
Draft ROD	05/14/07	Public comment extended from mid-February to mid-March.
Response to Comments	08/07/07	Comments received 06/21/07.
Final ROD	11/29/07	Resolution of comments reached 11/02/07.
ROD Issued	02/12/08	NASA signed 01/07/08; EPA signed 02/12/08

### NO FURTHER ACTION IS REQUIRED FOR THIS SITE.

### TABLE 5-7 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>PHOTOGRAPHIC TANK SITE (M-15)</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft ERA Work Plan	02/16/05	
Response to Comments	07/08/05	
Final ERA Work Plan	08/31/05	
Draft ERA Report	03/30/06	Field work completed 10/07/05.
Response to Comments	10/06/06	Comments received 08/23/06.
Final ERA Report	02/07/07	Resolution of comments reached 01/08/07.
No Action Decision Statement	02/09/07	EPA, DEQ and NASA signed a No Action Decision Statement included in the Final ERA Report.

### NO FURTHER ACTION IS REQUIRED FOR THIS SITE

SUBMITTAL	DUE DATE	COMMENT
Draft FS	03/01/05	
Response to Comments	07/20/05	
Final FS Report	08/31/05	
Draft PRAP	11/28/05	
Response to Comments	03/14/06	Comments on the draft PRAP received 02/02/06.
Final PRAP	09/28/06	Several Draft Final versions of the PRAP were prepared and comment resolution was reached 09/11/06.
Draft ROD	04/12/07	EPA approval of PRAP received 01/25/07. Public Comment Period extended fro mid-February to mid-March.
Response to Comments	07/05/07	Comments received 05/24/07.
Final ROD	11/01/07	Resolution of comments reached 10/09/07. NASA signed 11/01/07; EPA signed 12/19/07.
Draft Pilot Study Work Plan and LUC Design	03/17/08	Per EPA/NASA agreement, a Pilot Study Work Plan will be submitted.
Response to Comments	06/26/08	Comments on draft WP received 5/1/08 and on LUC Design received 5/9/08.
Final Pilot Study Work Plan and LUC Design	11/03/08	Resolution of comments delayed until 10/27/08
Draft Free Product Monitoring Plan	02/06/09	Pilot Study field work completed 12/8/08 through 01/16/09.
Response to Comments	03/16/09	Comments received 03/05/09.
Final Free Product Monitoring Plan	04/14/09	Comments resolved 04/06/09.

SUBMITTAL	DUE DATE	COMMENT
Draft Pilot Study Report	04/06/09	Pilot Study field work completed 12/8/08 through 01/16/09.
Response to Comments	06/15/09	Comment resolution extended from 06/15/09 through 07/20/09.
Final Pilot Study Report	07/20/09	
Supplemental Sampling Plan	07/20/09	Approved upon submittal.
Draft Supplemental Sampling Report	12/1/2009	
Response to Comments	3/12/2010	
Final Supplemental Sampling Report	4/12/2010	
Draft RA Work Plan and LTM Work Plan	4/28/2010	
Response to Comments	7/1/2010	
Final RA Work Plan and LTM Work Plan	8/6/2010	
Quarterly Sampling Report	6/8/10	
Quarterly Sampling Report	8/18/10	
Quarterly Sampling Report	12/10/10	
Draft CY'10 Annual Groundwater Summary Report	3/17/11	
Response to Comments	10/19/10	Comments received August and September 2010
Final CY'10 Annual Groundwater Summary Report	11/21/11	Comments resolved 11/8/11.

SUBMITTAL	DUE DATE	COMMENT
Draft RACR	5/10/11	Decision to consider remedial action completion delayed until 4 rounds of monitoring was completed.
Response to Comments	11/28/11	Comments received 10/19/11
Final RACR	12/14/11	Comments resolved 12/5/11
Semi-Annual Sampling Report	6/22/11	Sampling completed 3/23/11
Draft CY'11 Annual Groundwater Summary Report	12/14/11	Sampling conducted 9/16/11
Response to Comments	5/22/12	Comments received 5/18/12
Final CY'11 Annual Groundwater Report	6/18/12	Comments resolved 6/13/12
Semi-Annual Sampling Report	5/22/12	Field sampling completed 3/16/12
Draft Long-Term Monitoring Plan – Revision 1	8/2/12	
Final Long-Term Monitoring Plan – Revision 1	8/13/12	Draft accepted as final with no changes
Draft CY'12 Annual Groundwater Summary Report	12/13/12	Field work completed 9/20/12
Response to Comments	4/24/13	Comments received 4/22/13
Final CY'12 Annual Groundwater Summary Report	6/10/13	Comments resolved 5/20/13
Semi-Annual Sampling Report	7/11/13	Field sampling 3/20/13
Draft Five-Year Review Report	6/10/13	
Response to Comments	11/20/13	Received comments 11/1/13
Final Five-Year Review Report	2/4/14	Comments resolved 1/8/14
EPA Concurrence/Approval	3/6/14	

Draft CY'13 Annual Groundwater Summary Report	12/11/13	Field sampling 9/7/13
Response to Comments	2/12/14	Comments received 1/22/14
Final CY'13 Annual Groundwater Summary Report	2/12/14	Comments did not require responses/resolution; editorial only.
Long-Term Monitoring Plan – Rev2	2/28/14	
Semi-Annual Sampling Report	6/10/14	Field sampling 3/18/14
Draft CY'14 Annual Groundwater Summary Report	12/17/14	Field sampling 9/22/14
Response to Comments	2/20/15	Received comments 1/30/15
Final CY'14 Annual Groundwater Summary Report	4/21/15	Comments resolved 4/7/15
Semi-Annual Sampling Report	5/27/15	Field sampling 3/20/15
Draft Long-Term Monitoring Plan – Revision 3	7/27/15	
Response to Comments	8/27/15	Received comments 8/13/15
Final Long-Term Monitoring Plan – Revision 3	9/21/15	Comments resolved 9/15/13
Round Ten Sampling Report	2/16/16	Sampling completed 12/3/15
Round Eleven Sampling Report	1/3/17	Field sampling completed 9/28/16
Draft PFAS Investigation Work Plan	8/12/16	
Response to Comments	10/13/16	DEQ comments 9/14/16; EPA comments 9/30/16
Final PFAS Investigation Work Plan	10/27/16	Comments resolved 10/20/16
Draft PFAS Sampling Report	2/3/17	Field sampling completed December 2016
Response to Comments	5/22/17	Comments received: DEQ 2/28/17; EPA 5/1/17

Final PFAS Sampling Report	6/28/17	
Round Twelve Sampling Report	11/13/17	
Round Thirteen Sampling Report	6/26/2018	Field sampling completed March 28, 2018; EPA approval 9/20/2018.
Draft Round Fourteen Sampling Report	4/24/19	Field sampling completed December 2018; comments received 5/23/19 (DEQ) and 5/24/19 (EPA)
Draft Final Round Fourteen Sampling Report	7/20/19	Comments received 9/4/19 (EPA and DEQ)
Final Round Fourteen Sampling Report	9/30/19	
Draft Five-Year Review	10/2/18	
Response to Comments	12/10/18	Comments received 10/11/18 (DEQ) and 11/30/18 (EPA)
Final Five-Year Review	2/18/19	
Public Notice	03/20,21/19	
Round Fifteen Sampling Report	90 days after completion of field work	Field sampling anticipated March 2020
Round Sixteen Sampling Report	90 days after completion of field work	Field sampling anticipated June 2021

# TABLE 5-9SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PISTOL/RIFLE RANGE (MAIN BASE FIRING RANGE COMPLEX)NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft SI Work Plan	09/27/06	
Response to Comments	02/26/07	Comments received 01/05/07
Final SI Work Plan	05/04/07	Resolution of comments reached 04/06/07.
Draft SI Report	03/31/08	Work Plan approval received 08/22/07 and field work completed 11/14/07. EPA granted a 3 week extension.
Response to Comments	07/15/08	Comments received 06/03/08
Final SI Report	11/25/08	Resolution of comments anticipated 30 days after submittal of response to comments.
Technical Memorandum	03/26/09	SI Report approval received 03/06/09.
Draft Site Summary and Risk Re-Evaluation Report <sup>(1)</sup>	8/26/14	
Response to Comments	11/21/14	Comments received 10/30/14
Final Site Summary and Risk Re-Evaluation Report	5/15/15	Resolved comments 2/19/15
Draft Rifle Range Firing Point Supplemental Sampling Plan	3/13/15	
Response to Comments	4/20/15	Comments received 3/31/15
Final Rifle Range Firing Point Supplemental Sampling Plan	5/15/15	Resolved comments 4/21/15
Aircraft Gun Testing Firing Range Sampling Plan	5/15/15	Accepted as final
Data Summary Report for Rifle Range and Aircraft Gun Testing Range	7/27/15	Accepted as final
Draft EE/CA	6/16/15	
Response to Comments	9/23/15	Comments received 8/25/15

### TABLE 5-9 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>PISTOL/RIFLE RANGE (MAIN BASE FIRING RANGE COMPLEX)</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN Cont.

SUBMITTAL	DUE DATE	COMMENT
Final EE/CA	12/8/15	Comments resolved 12/2/15
Draft Action Memorandum	11/27/15	
Response to Comments	1/15/16	Comments received 1/14/16
Final Action Memorandum	4/7/16	Comments resolved 2/9/16
Draft Removal Action Work Plan	1/15/16	
Response to Comments	4/15/16	Comments received 4/1/16
Final Removal Action Work Plan	5/24/16	Comments resolved 5/13/16
Interim Data Report	6/27/16	Field work commenced 5/23/16.
Draft Removal Action Construction Completion Report	11/10/16	Field work completed 8/16/16
Response to Comments	2/17/17	Regulators comments received 1/10/17
Final Removal Action Construction Completion Report and Concurrence Statement	3/21/17	Concurrence Statements signed by regulators on 3/21/17

Note: Dates in **bold** indicate actual date of submittal.

(1) Addresses Pistol and Rifle Ranges; Skeet Range determined to be a FUD Site

### TABLE 5-10 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>SOUTH END DISPOSAL AREA</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft MEC Survey and Clearance Work Plan HASP	09/15/2010	
Final MEC Survey and Clearance Work Plan HASP	10/1/10	
Limited Action Summary Report	2/7/11	
Draft Preliminary Assessment	5/10/11	
Response to Comments	11/22/11	Comments received 9/23/11
Final Preliminary Assessment	9/28/12	Comments resolved 9/14/12
Draft Sampling and analysis Plan (SAP) for screening sampling	7/3/12	
Response to Comments	9/11/12	Comments received 8/13/12
Final SAP for screening sampling	9/11/12	Final SAP submitted with responses; approved by EPA 10/22/12
Draft Site Screening Report	4/1/13	Field work 11/29/12
Response to Comments	8/16/13	Comments received 6/22/13
Final Site Screening Report	3/28/14	Comments resolved 1/21/14
Final Decision Document	3/3/14	The NFA Concurrence Statement was signed 3/3/14, incorporated into the final Site Screening Report and distributed 3/28/14.

### NO FURTHER ACTION IS REQUIRED FOR THIS SITE.

### TABLE 5-11 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>AREA OF INTEREST 20 (AI-20)</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Site Screening Work Plan	8/21/14	
Response to Comments	9/19/14	Comments received 9/8/14
Final Site Screening Work Plan	9/30/14	Resolution of comments reached 9/23/14
Draft Site Screening Report	2/20/15	Field work ended 11/14/14
Response to Comments	4/23/15	Received comments 4/14/15
Final Site Screening Report	5/15/15	Comments resolved 5/11/15
Draft Action Memorandum	3/10/15	
Response to Comments	4/9/15	Received comments 3/30/15
Final Action Memorandum	6/29/15	Resolved comments 4/30/15
Draft Removal Action Work Plan	4/9/15	
Response to Comments	6/15/15	Received comments 5/19/15
Final Removal Action Work Plan	7/24/15	Resolved comments 6/30/15
Public Notice	7/30/15	Public notice published
Draft Removal Action Completion Report	12/22/15	Field work completed 9/4/15
Response to Comments	3/16/16	Comments received 3/1/16
Final Removal Action Completion Report and NFA Concurrence Statement	7/14/16	Comment resolution 6/20/16. Concurrence Statement signed 9/20/16

### NO FURTHER ACTION IS REQUIRED FOR THIS SITE.

# TABLE 5-12SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021NORTH ISLAND TRANSFORMERSNASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Site Screening Work Plan	8/21/14	
Response to Comments	9/19/14	Comments received 9/15/14
Final Site Screening Work Plan	10/15/14	Resolution of comments reached 9/23/14. A revised Final was issued to replace 1 page
Draft Site Screening Report	2/24/15	Field work completed 12/4/14
Response to Comments	5/22/15	Received comments 3/30/15
Final Site Screening Report	8/10/15	Resolved comments 8/4/15
NIT 1 and 17 Draft Characterization Work Plan	3/13/15	
Response to Comments	4/23/15	Comments received 3/25/15
Final NIT 1 and NIT 17 Characterization Work Plan	6/16/15	Resolved comments 5/22/15
Draft NIT 1 and NIT 17 Characterization Report	10/26/15	Field work completed 8/12/15
Response to Comments	12/21/15	Comments received 12/11/15
Final NIT 1 and NIT 17 Characterization Report	1/21/16	Comments resolved 1/11/16
Draft Action Memo	11/24/15	
Response to Comments	1/11/16	Comments received 12/28/15
Final Action Memorandum	1/25/16	Resolution of comments 1/15/16.
Draft NIT-1, -7, -14, and -17 Removal Action Work Plan	12/8/15	
Response to Comments	1/20/16	Comments received 1/4/16
Final NIT-1, -7, -14, and -17 Removal Action Work Plan	2/18/16	Comments resolved 1/26/18
Public Notice	3/2/16	
Draft NIT-1, -7, -14, and -17 Removal Action Completion Report	8/12/16	Field work completed 4/6/16
Response to Comments	11/10/16	DEQ Comments 9/22/16; EPA comments 10/27/16

### TABLE 5-12 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>NORTH ISLAND TRANSFORMERS</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN Cont.

SUBMITTAL	DUE DATE	COMMENT
Final NIT-1, -7, -14, and -17 Removal Action Completion Report and NFA Concurrence Statement	3/21/17	Concurrence Statement signed by regulators on 3/21/17
Draft NIT Supplemental Sampling Work Plan	6/25/15	
Response to Comments	7/29/15	Received comments received 7/24/15
Final NIT Supplemental Sampling Work Plan	7/29/15	Resolved comments 7/24/15
Draft NIT Supplemental Sampling Report	12/8/15	Field work completed 9/25/15
Final NIT Supplemental Sampling Report	2/29/16	
Draft Consensus Statement for 13 NIT Sites	3/22/16	
Response to Comments	7/14/16	Comments received 6/30/16
Final NIT Consensus Statement for 13 NIT Sites and NFA Concurrence Statement	7/28/16	Comments resolved 7/18/16. NFA Concurrence Statement signed 9/20/16

### TABLE 5-13 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>STRUCTURES F-10A/F-10B</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Site Screening Work Plan	9/13/16	
Response to Comments	12/1/16	Comments: DEQ 10/28/16; EPA 10/31/16
Final Site Screening Work Plan	12/21/16	
Draft Site Screening Report	6/30/17	Field work completed 2/1/17
Response to Comments	3/31/20	Comments received 12/21/2017 (DEQ) and 2/13/2018 (EPA); comments have been discussed at meetings and responses will be completed after resolution of use of background concentrations
Final Site Screening Report	30 days after resolution of comments	Resolution of comments anticipated 30 days after receipt of comments

# TABLE 5-14SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021STRUCTURE N-166NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Site Screening Work Plan	9/13/16	
Response to Comments	12/1/16	Comments: DEQ 10/28/16; EPA 10/31/16
Final Site Screening Work Plan	12/21/16	
Draft Site Screening Report	6/30/17	Field work completed 2/1/17
Response to Comments	3/31/20	Comments received 12/21/2017 (DEQ) and 2/13/2018 (EPA); comments have been discussed at meetings and responses will be completed after resolution of use of background concentrations
Final Site Screening Report	30 days after resolution of comments	Resolution of comments anticipated 30 days after receipt of comments

SUBMITTAL	DUE DATE	COMMENT
Draft Site Screening Work Plan	9/13/16	
Response to Comments	12/1/16	Comments: DEQ 10/28/16; EPA 10/31/16
Final Site Screening Work Plan	12/21/16	
Draft Site Screening Report	6/30/17	Field work completed 2/1/17
Response to Comments	3/31/20	Comments received 12/21/2017 (DEQ) and 2/13/2018 (EPA); comments have been discussed at meetings and responses will be completed after resolution of use of background concentrations
Final Site Screening Report	30 days after resolution of comments	Resolution of comments anticipated 30 days after receipt of comments

# TABLE 5-16SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PER- AND POLYFUORINATED ALKYL SUBSTANCES (PFAS) SAMPLINGNASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Work Plan	4/7/17	No regulator comments
Response to Comments	4/19/17	Comments: EPA 4/10/17
Final Work Plan	4/19/17	
Draft Sampling Report	7/18/17	Field work completed 2/1/17
Response to Comments	9/21/17	Comments: EPA 8/17/17; VDEQ 8/14/17
Final Sampling Report	10/17/17	
Draft Perimeter Well Work Plan	7/18/17	
Response to Comments	8/11/17	Comments: EPA 7/27/17; DEQ 7/19/17; VDH 7/31/17
Final Perimeter Well Work Plan	8/18/17	
Draft Aquifer Test Work Plan	8/14/17	
Response to Comments	9/13/17	Comments: EPA 8/24/17; DEQ 8/18/17; VDH 8/12/17
Final Aquifer Work Plan	10/2/17	
Draft Perimeter Well/Aquifer Test Report	3/15/18	Field work completed in December 2017
Response to Comments	11/28/18	Comments received 8/8/18 (DEQ) and 8/15/18 (EPA)
Final Perimeter Well/Aquifer Test Report	2/8/19	
Draft Preliminary Assessment and Site Investigation Work Plan	5/24/18	EPA comments received 6/24/18; DEQ indicated they had no comments on 6/19/18.
Response to Comments	11/1/18	Comments received 2/20 (EPA) and 2/21 (DEQ)
Final Preliminary Assessment and Site Investigation Work Plan	3/29/19	
Draft Site Investigation Report	1/14/20	Final field activities completed in September 2019
Response to Comments	45 days after receipt of comments	Comments anticipated 30 days after draft

### TABLE 5-16 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>PER- AND POLYFUORINATED ALKYL SUBSTANCES (PFAS) SAMPLING</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN Cont.

SUBMITTAL	DUE DATE	COMMENT
Final Site Investigation Report	30 days after resolution of comments	Resolution of comments expected 30 days after response to comments
Draft 2018 Annual PFAS Report	2/6/19	Comments were received on 2/27/19 (DEQ) and 3/28/19 (EPA)
Response to Comments	9/11/19	
Final 2018 Annual PFAS Report	9/27/19	
Draft 2019 Annual PFAS Report	1/15/20	
Response to Comments	45 days after receipt of comments	Comments anticipated 30 days after draft Comments anticipated 30 days after draft
Final 2019 Annual PFAS Report	30 days after resolution of comments	Resolution of comments expected 30 days after response to comments

### TABLE 5-17 <u>SCHEDULE OF ANNUAL SMP UPDATES AND SEMI-ANNUAL PROGRESS REPORTS</u> FISCAL YEARS 2020 and 2021 NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

ANNUAL SMP UPDATES	DUE DATE
Fiscal Years 2005 and 2006	2/3/05
Fiscal Years 2006 and 2007	11/22/05
Fiscal Years 2007 and 2008	11/30/06
Fiscal Years 2008 and 2009	11/28/07
Fiscal Years 2009 and 2010	12/3/08
Fiscal Years 2010 and 2011	12/1/09
Fiscal Years 2011 and 2012	12/10/10
Fiscal Years 2012 and 2013	12/5/11
Fiscal Years 2013 and 2014	12/13/12
Fiscal Year 2014 and 2015	2/11/14
Fiscal Year 2015 and 2016	12/17/14
Fiscal Year 2016 and 2017	12/1/15
Fiscal Year 2017 and 2018	12/9/16
Fiscal Year 2018 and 2019	12/11/17
Fiscal Year 2019 and 2020	12/21/18
Fiscal Year 2020 and 2021	12/1/19
Fiscal Year 2021 and 2022	12/1/20
Fiscal Year 2022 and 2023	12/1/21
SEMI-ANNUAL PROGRESS REPORTS	
Fiscal Year 2005 Semi-Annual Progress Report	6/1/05
Fiscal Year 2006 Semi-Annual Progress Report	5/25/06
Fiscal Year 2007 Semi-Annual Progress Report	5/24/07
Fiscal Year 2008 Semi-Annual Progress Report	5/28/08
Fiscal Year 2009 Semi-Annual Progress Report	6/1/09
Fiscal Year 2010 Semi-Annual Progress Report	5/26/10
Fiscal Year 2011 Semi-Annual Progress Report	6/22/11
Fiscal Year 2012 Semi-Annual Progress Report	5/30/12
Fiscal Year 2013 Semi-Annual Progress Report	Waived
Fiscal Year 2014 Semi-Annual Progress Report	Waived
Fiscal Year 2015 Semi-Annual Progress Report	6/16/15
Fiscal Year 2016 Semi-Annual Progress Report	6/1/16
Fiscal Year 2017 Semi-Annual Progress Report	5/8/17

### TABLE 5-17 <u>SCHEDULE OF ANNUAL SMP UPDATES AND SEMI-ANNUAL PROGRESS REPORTS</u> FISCAL YEARS 2020 and 2021 NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

	DUE DATE
Fiscal Year 2018 Semi-Annual Progress Report	7/14/18
Fiscal Year 2019 Semi-Annual Progress Report	6/27/19
Fiscal Year 2020 Semi-Annual Progress Report	6/15/20
Fiscal Year 2021 Semi-Annual Progress Report	6/15/21

### TABLE 7-1 SCHEDULE OF DELIVERABLES/SUBMITTALS FISCAL YEARS 2020 and 2021 <u>PROJECT 09 – SKEET RANGE FUDS PROGRAM</u> NASA WALLOPS FLIGHT FACILITY SITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft Supplemental Sampling Work Plan	11/3/16	Overall approach changed; supplemental sampling not completed and a Remedial Investigation will be implemented
Draft RI Sampling and Analysis Plan	9/6/17	
Response to Comments	3/13/18	Comments received December 2017
Final RI Sampling and Analysis Plan	3/13/18	Field work completed 3/31/18
Draft RI Sampling and Analysis Plan - Addendum	7/20/18	
Response to Comments - Addendum	10/23/18	EPA comments received 9/21/18
Final RI Sampling and Analysis Plan - Addendum	10/23/18	EPA approval – 11/9/18
Draft RI Report	9/17/19	Field activities completed 3/27/19
Response to Comments	12/16/19	Comments from EPA and DEQ received in October 2019
Final RI Report	30 days after resolution of comments	Resolution of comments expected 30 days after response to comments

# TABLE 7-2SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PROJECT 11 – MAIN BASE AREAS OF INTEREST FUDS PROGRAMNASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft RI Work Plan	2/8/19	Comments received 3/16/19 (EPA) and 3/29/19 (DEQ); comments discussed at April and September 2019 RPM meetings. A scoping session is planned for the December 2019 RPM meeting
Revised Draft RI Work Plan	45 days after resolution of comments	Comments anticipated to be resolved at December 2019 RPM Meeting
Response to Comments	45 days after receipt of comments	Comments anticipated to be 60 days after revised draft submitted
Final RI Work Plan	30 days after resolution of comments	Resolution of comments anticipated 30 days after response to comments
Draft RI Report	180 days after field work	Field work anticipated to commence 30 days after final work plan
Response to Comments	45 days after receipt of comments	Comments anticipated 60 days after draft
Final RI Report	30 days after resolution of comments	Resolution of comments anticipated 30 days after response to comments
Draft ESI Work Plan, AI-28 and AI-67	11/1/17	
Response to Comments	1/24/18	Comments: EPA 11/30/17; DEQ 11/21/17
Final ESI Work Plan, AI-28 and AI-67	1/24/18	
Draft ESI Report, AI-28 and AI-67	7/3/18	Field activities completed 2/1/18
Response to Comments	03/31/20	EPA comments received 10/12/18; follow-up conference call 10/24/18. Resolution on- going, pending agreement on site background values.
Final ESI Report, AI-28 and AI-67	30 days after resolution of comments	

# TABLE 7-3SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PROJECT 13 – WASTE WATER TREATMENT PLANT (WWTP)NASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft PRAP	1/22/16	
Response to Comments	4/14/16	DEQ and EPA comments received 3/18/16
Final PRAP	8/31/16	Comments resolved 4/26/15 but final PRAP delayed to coincide with issuance of other facility PRAPS
Draft ROD	6/23/16	
Response to Comments	1/25/17	DEQ comments resolved 2/7/17
Draft Final ROD	7/11/17	Response to additional EPA comments on 2/1/18
Response to Comments	7/24/17 (initial); 10/26/18 (most recent)	Additional comments received from EPA on 3/18/18 and 10/26/18
Final ROD	30 days after resolution of comments	EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ.
Draft Remedial Design	120 days after final ROD	
Response to Comments	45 days after receipt of comments	Comments anticipated 60 days after draft
Final Remedial Design	30 days after resolution of comments	Resolution of comments anticipated 30 days after response to comments

# TABLE 7-4SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PROJECT 15 – SITE 9 ABANDONDED DRUM DUMPNASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft PRAP	11/23/15	
Response to Comments	2/11/16	DEQ comments 1/5/16; EPA comments 1/28/16
Final PRAP	5/19/16	Comments resolved 3/7/16 and final approved 3/14/16 but delayed issuance until public comment period
Draft ROD	4/7/16	
Response to Comments	7/24/17	DEQ comments 5/26/16; EPA comments 12/28/16; DEQ comments resolved 2/7/17; EPA submitted additional comments on 5/18/17
Draft Final ROD	7/24/17	Initial response to EPA comments submitted on 2/1/18; Two additional responses completed; EPA approved responses on 10/12/18
Response to Comments	11/1/18	EPA comments resolved on 2/21/19
Final ROD	2/21/19	Final signatures on the ROD are being held until the Administrative Order on Consent (AOC) for FUDS is signed

# TABLE 7-5SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PROJECT 15 – SITE 14 DEBRIS PILENASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

SUBMITTAL	DUE DATE	COMMENT
Draft PRAP	11/23/15	
Response to Comments	2/4/16	DEQ comments 1/6/16; EPA comments 2/4/16
Final PRAP	5/19/16	Comments resolved 3/14/16 and final approved 3/15/16 but delayed issuance until public comment period
Draft ROD	3/14/16	
Response to Comments	7/13/17	DEQ comments 5/20/16; final EPA comments on 6/9/17; resolution of DEQ comments 2/8/17
Draft Final ROD	8/30/17	EPA technical comments received on 1/11/18
Response to Comments	6/14/18	Additional EPA comments received on 10/30/18
Final ROD	30 days after resolution of comments	EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ.

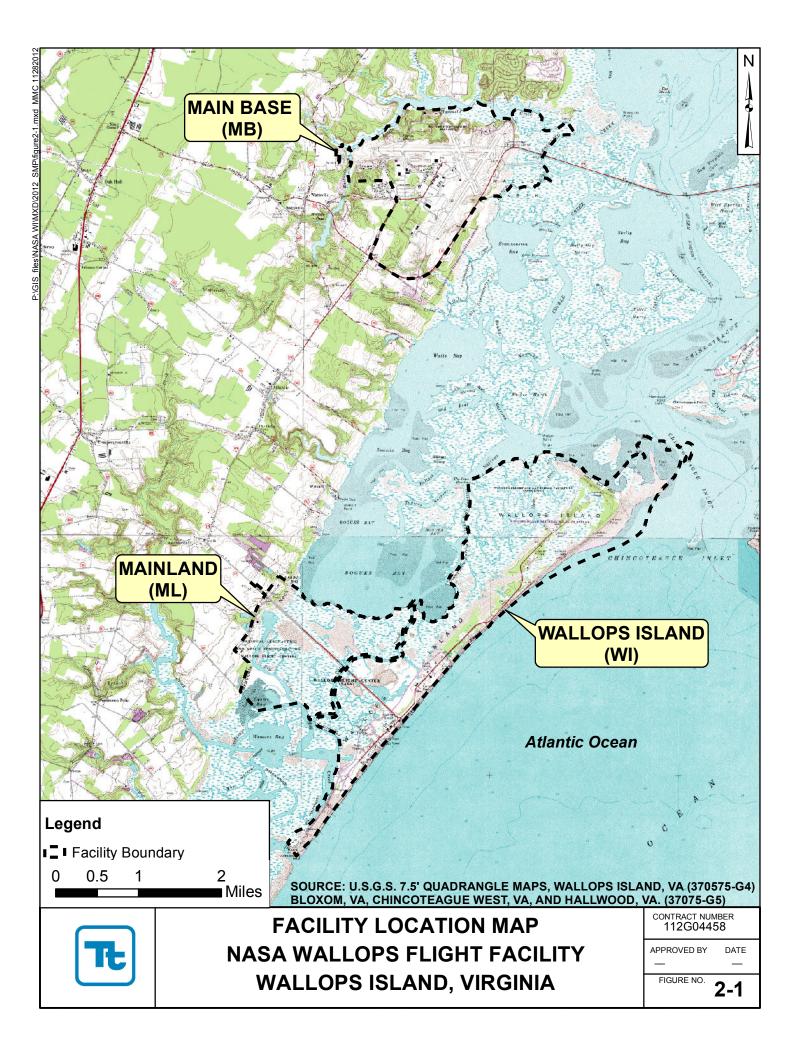
Note: Dates in **bold** indicate actual date of submittal.

# TABLE 7-6SCHEDULE OF DELIVERABLES/SUBMITTALSFISCAL YEARS 2020 and 2021PROJECT 15 – SITE 15 DEBRIS PILENASA WALLOPS FLIGHT FACILITYSITE MANAGEMENT PLAN

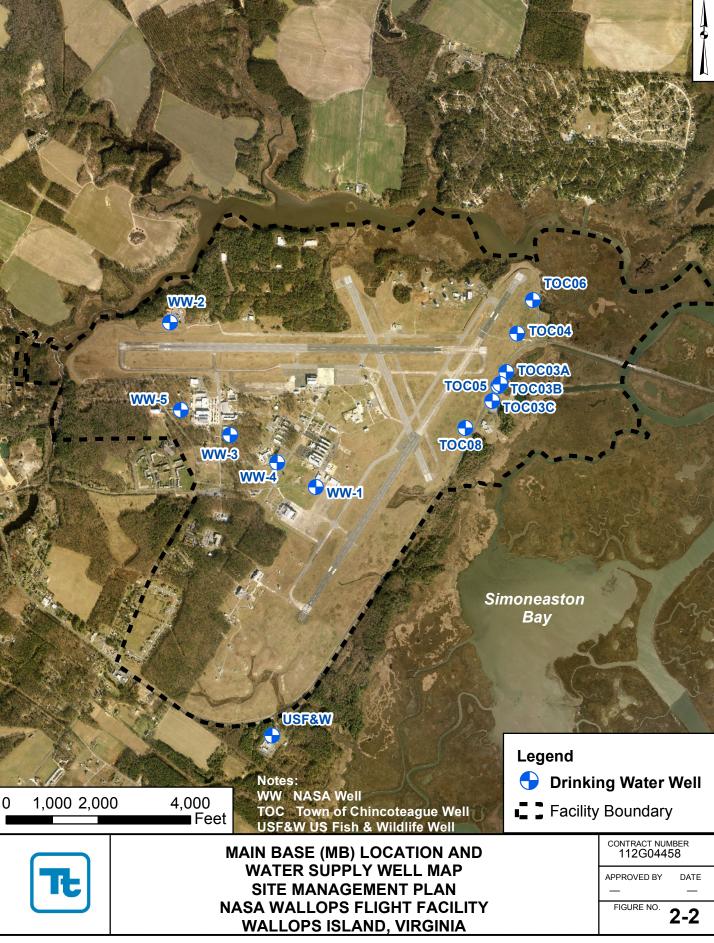
SUBMITTAL	DUE DATE	COMMENT
Draft PRAP	11/23/15	
Response to Comments	3/4/16	DEQ comments 1/5/16; EPA comments 2/4/16
Final PRAP	5/19/16	Comments resolved 3/7/16 and final approved 3/15/16 but delayed issuance until public comment period
Draft ROD	3/14/16	
Response to Comments	7/13/17	DEQ comments 5/20/16; final EPA comments on 6/9/17; DEQ comments resolved 2/8/17
Draft Final ROD	8/30/17	EPA technical comments received on 1/11/18
Response to Comments	6/14/18	Additional EPA comments received on 10/30/18
Final ROD	30 days after resolution of comments	EPA provided a review of the 2004 Site Background Report on May 10, 2019, and NASA is working toward an approach to background that will be acceptable to the EPA and DEQ.

Note: Dates in **bold** indicate actual date of submittal.

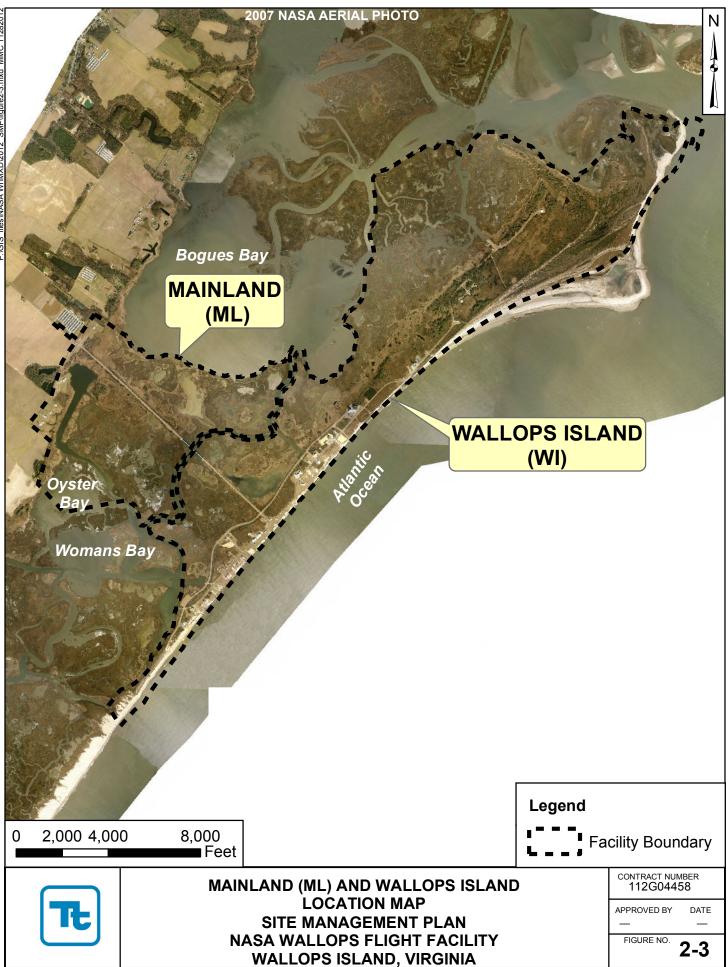
FIGURES





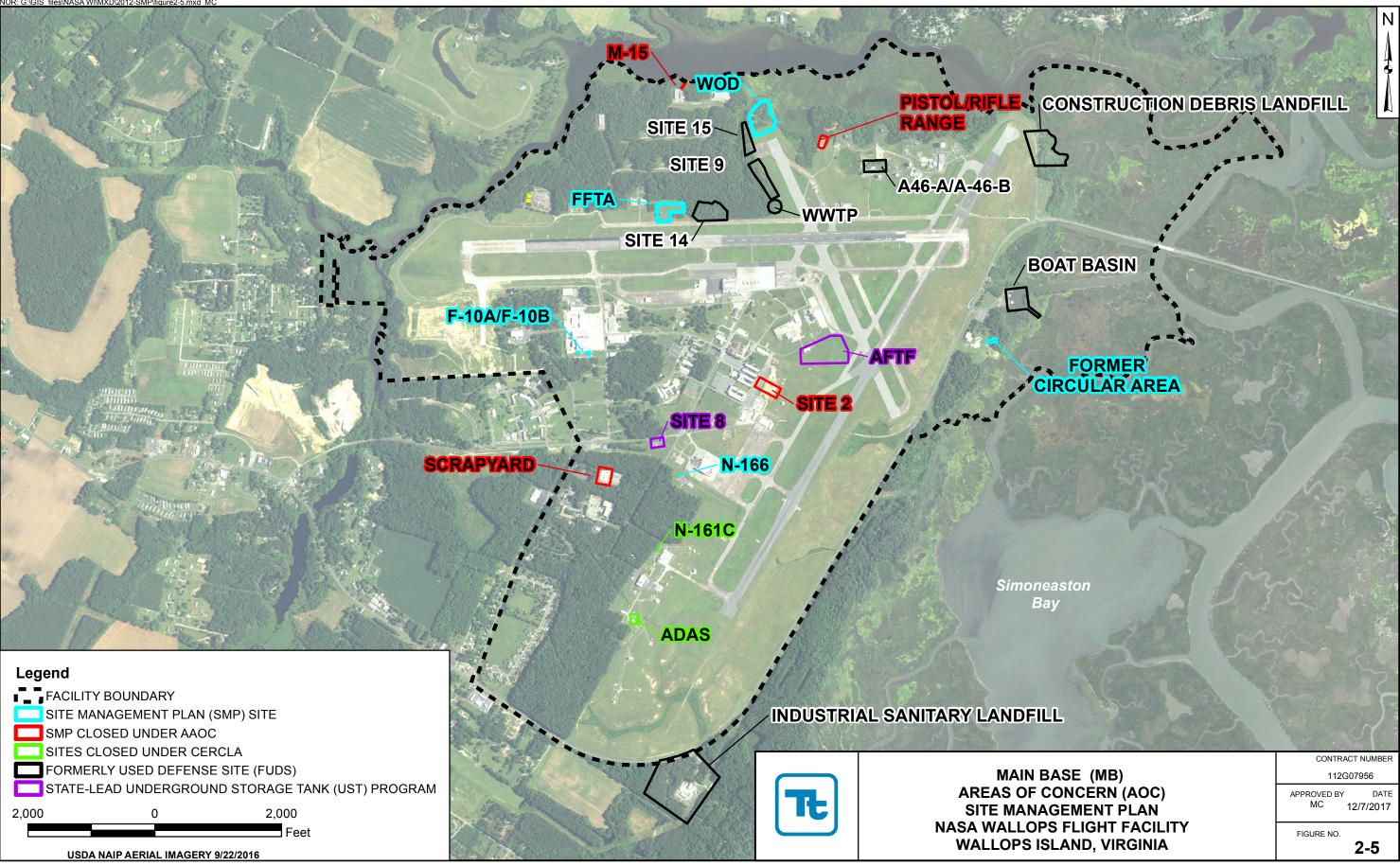


Ν

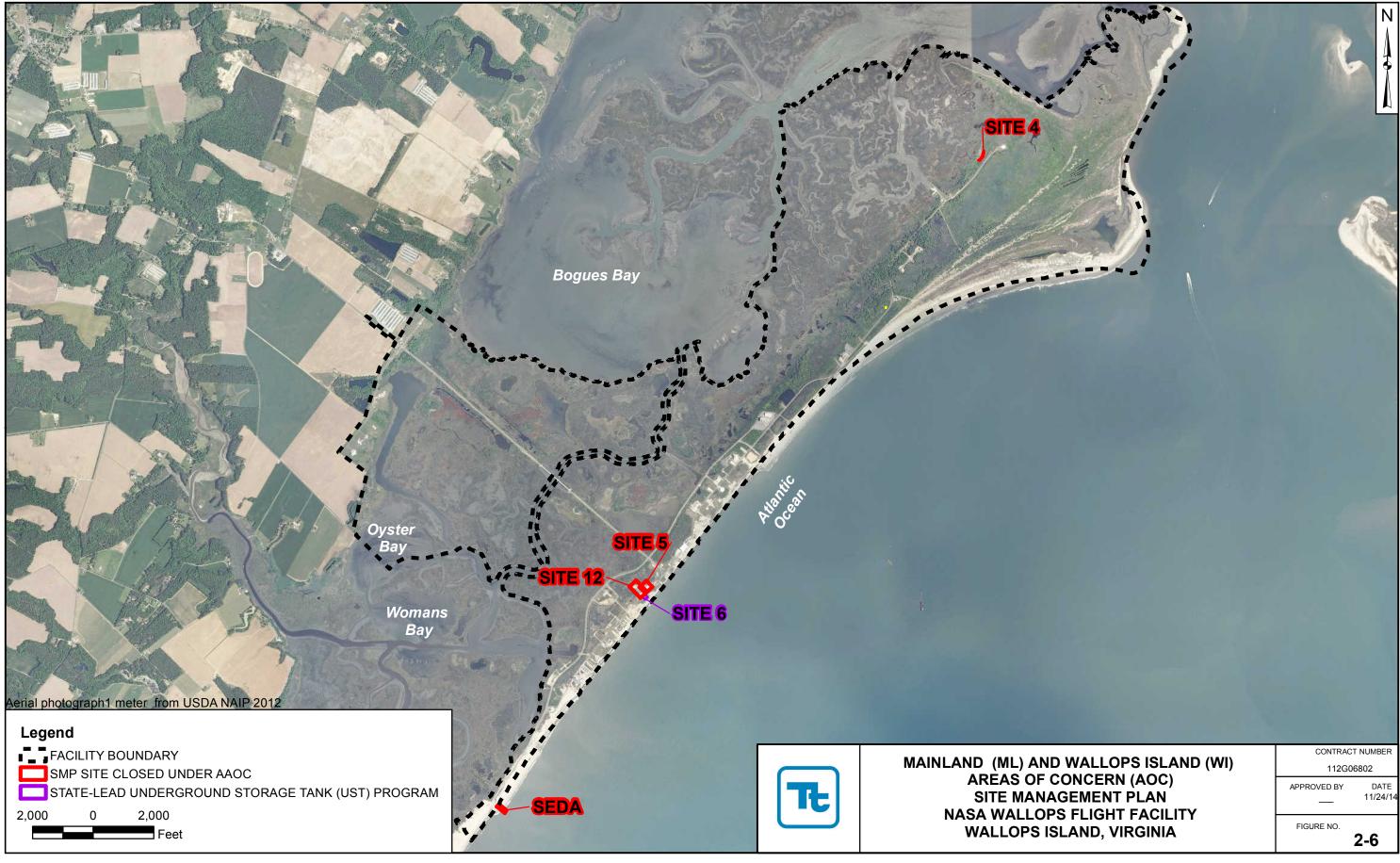




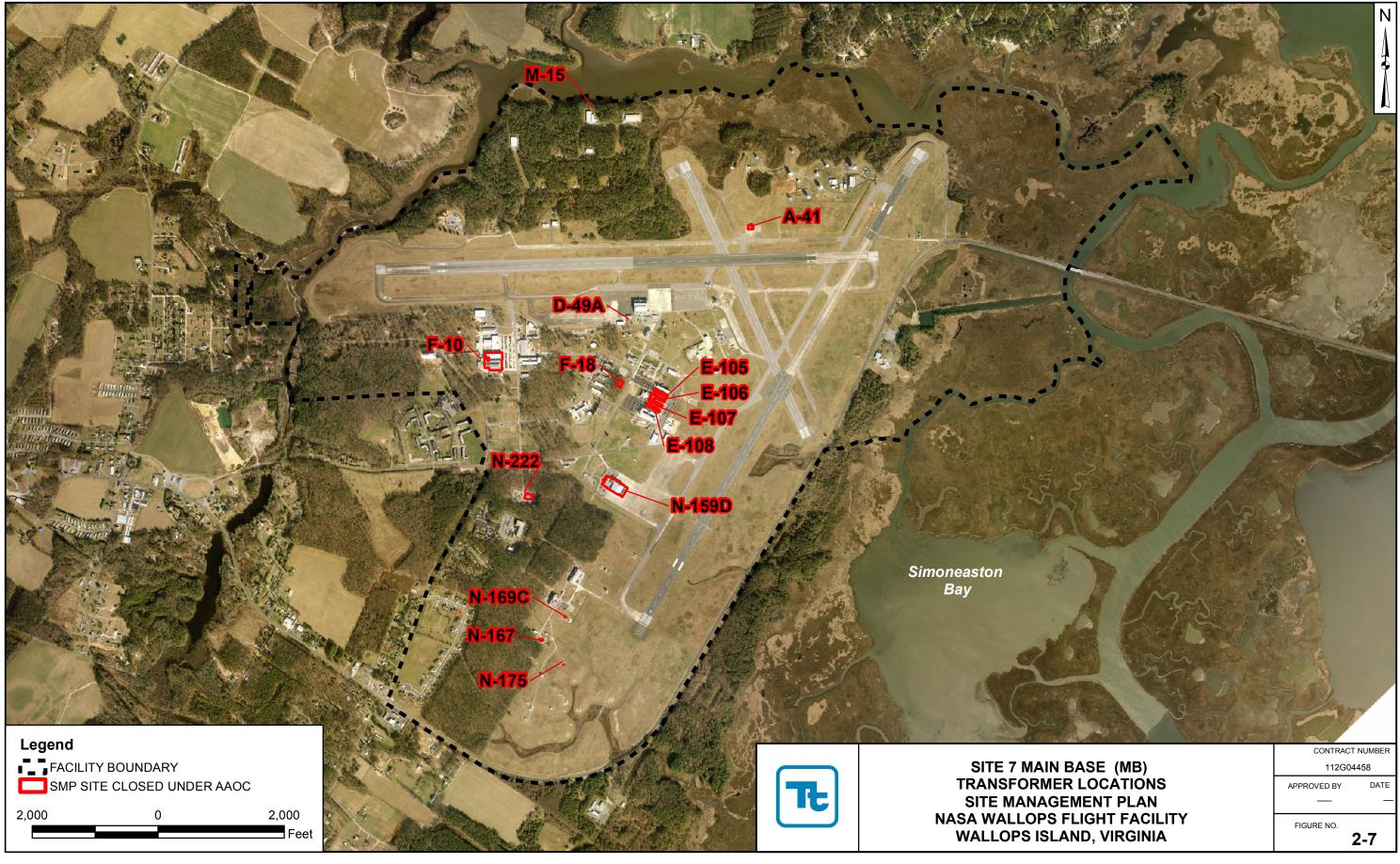
NOR: G:\GIS files\NASA WI\MXD\2012-SMP\figure2-5.mxd MC

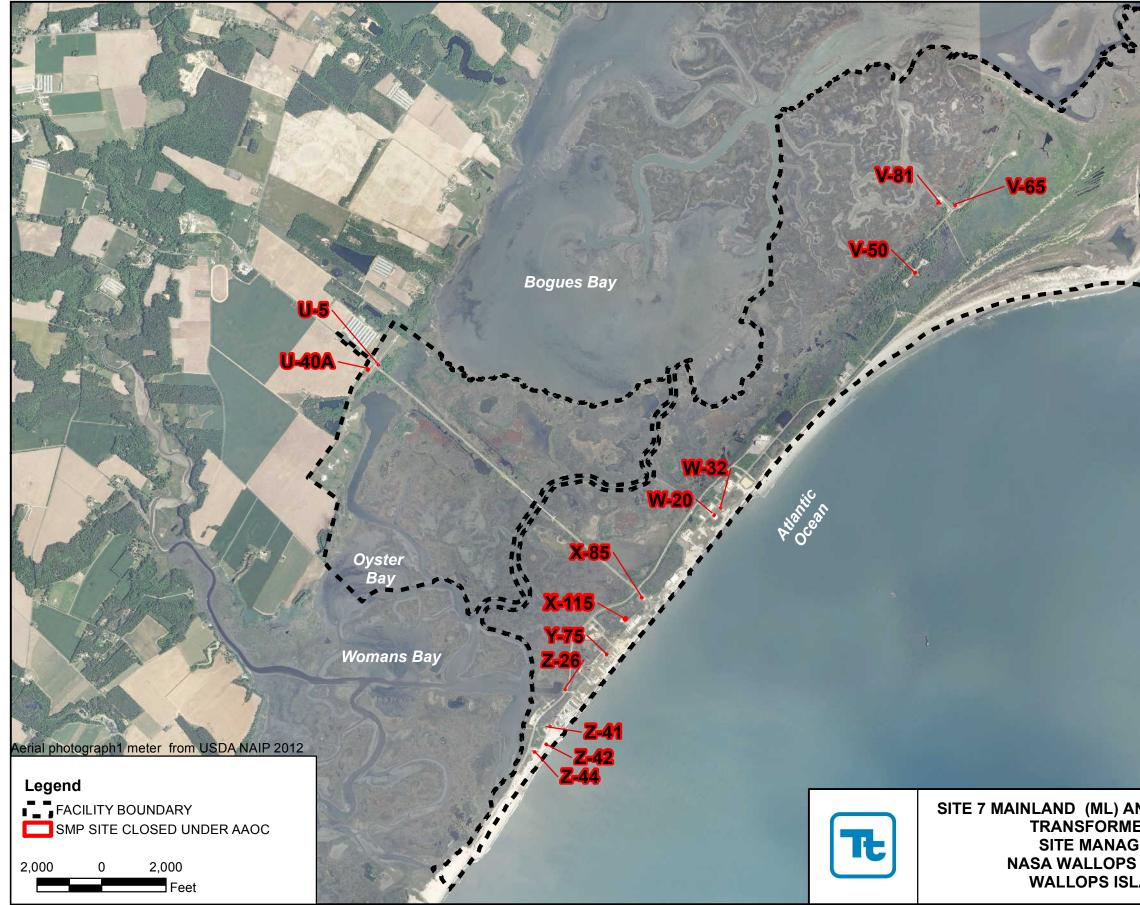


P:\GIS\_files\NASA WI\MXD\2012\_SMP\figure2-6.mxd MMC



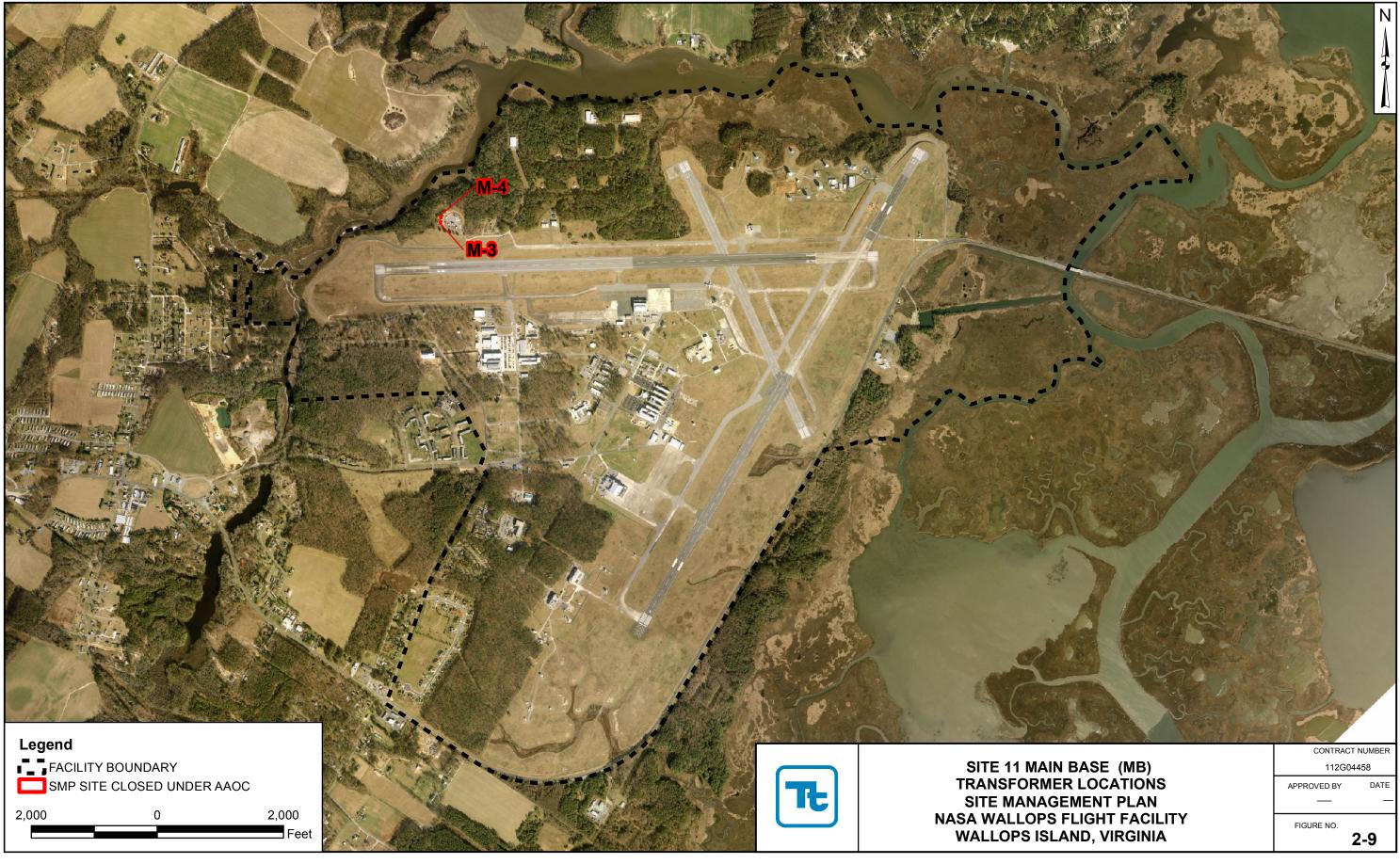
P:\GIS\_files\NASA WI\MXD\2012\_SMP\figure2-7.mxd MMC 11282012





	K
ND WALLOPS ISLAND (WI) ER LOCATIONS GEMENT PLAN 6 FLIGHT FACILITY	CONTRACT NUMBER 112G06802 APPROVED BY DATE 11/24/14
LAND, VIRGINIA	FIGURE NO. <b>2-8</b>

P:\GIS\_files\NASA WI\MXD\2012\_SMP\figure2-9.mxd MMC 11282012





AND WALLOPS ISLAND (WI) ER LOCATIONS GEMENT PLAN G FLIGHT FACILITY	
SEMENT PLAN	12G04458
FIGURE NO.	DI DATE
AND, VIRGINIA	

P:\GIS\_files\NASA WI\MXD\2012\_SMP\figure2-11.mxd MMC



FLIGHT FACILITY	F-1 IT-14 of Interest A)-20	
, <b>Z-II</b>	ATION MAP EMENT PLAN	112G06802 APPROVED BY DATE 11/24/14

APPENDIX A

ADMINISTRATIVE RECORD INDEX

		EPA AR							
DVD	ID No.	Category and Document	Date	No. of pages	Description of Document/Correspondence	<b>Doc.</b> Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.			1.0 Pre-Remedial				
					01.01 Pre-Remedial Investigation Cor	respondence	<u>;</u>		
1	0001	01.01.00.0001	3/1/1986	131	Vol. 1, Environmental Audit Goddard Space flight Center Wallops Flight Facility	Letter	WFF	Fred C. Hart Associates, Inc.	National Aeronautics and Space Administration (NASA)
1	0002	01.01.00.0002	9/18/1989	17	Review of Removal Actions, Waste Oil Site End of Runway 17-35	Letter	WOD	M. Green, NASA	James A. Asne/EBASCO Services, Inc.
1	0003	01.01.00.0003	3/3/1993	6	Locations and Maps for Coordination of Environmental Sites	Letter	WFF	Teresa Spagnuolo/NASA, Environmental Branch	NASA, Fac. Eng. Br.; Fac. Mgm. Sec; Plant O&M Br.
1	0004	01.01.00.0004	6/2/2003	9	Response to Comments on draft Site Screening Document M-15 Photographic Tank Site	Letter	M-15	Tetra Tech NUS, Inc.	NASA, EPA, VADEQ
1	0097	01.01.00.0005	6/23/2003	1	VADEQ response on the Draft Background Soil and Groundwater Investigation Report dated May 2003	Letter	MB	VADEQ	NASA
1	0098	01.01.00.0006	6/23/2003	2	VADEQ Comments on the Draft May 2003 Limited Site Investigation Final Report for Wallops Flight Facility	Memo	WFF	VADEQ	COE
1	0099	01.01.00.0007	7/15/2003	3	NASA Comments on the Draft May 2003 Limited Site Investigation Final Report for Wallops Flight Facility	Memo	WFF	NASA	COE
1	0100	01.01.00.0008	7/30/2003	5	EPA 3 Comments on the Draft May 2003 Limited Site Investigation Final Report for Wallops Flight Facility	Memo	WFF	EPA	COE
1	0101	01.01.00.0009	6/23/2003	20	COE Response to Comments on the Draft May 2003 Limited Site Investigation Final Report for Wallops Flight Facility	Memo	WFF	COE	NASA
1	0102	01.01.00.0010	9/5/2003	4	NASA Comments on the July 2003 Final Desktop Audit Report for Wallops Flight Facility	Memo	WFF	NASA	COE
1	0103	01.01.00.0011	10/3/2003	9	Response to EPA August 8, 2003 Comments on the Draft Background Soil and Groundwater Investigation Report dated May 2003	Letter	MB	TtNUS	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0104	01.01.00.0012	10/21/2003	9	COE Response to NASA Comments on the July 2003 Final Desktop Audit Report for Wallops Flight Facility	Memo	WFF	COE	NASA
1	0105	01.01.00.0013	2/23/2004	8	NASA Response to EPA January 9, 2004 Comments on the Draft Background Soil and Groundwater Investigation Report dated May 2003	Letter	MB	NASA	EPA
1	0106	01.01.00.0014	3/10/2004	2	NASA Response to EPA Comments 5 and 6 on the Draft Background Soil and Groundwater Investigation Report	Letter	MB	NASA	EPA
1	0107	01.01.00.0015	3/16/2004	1	Email - M. Price-Fay (EPA) to C. Turner (NASA) approval of the Final Background Soil and Groundwater Investigation Report	Letter	MB	EPA	NASA
1	0108	01.01.00.0016	5/27/2004	2	EPA Comments on the Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Site dated April 2004	Letter	M-15	EPA	NASA
1	0109	01.01.00.0017	7/13/2004	1	VADEQ Letter on the May 2004 Final Background Soil and Groundwater Investigation Report for Main Base	Letter	MB	Paul Herman/VADEQ	NASA
1	0110	01.01.00.0018	7/29/2004	3	VADEQ Comments on the Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Site dated April 2004	Letter	M-15	VADEQ	NASA
1	0111	01.01.00.0019	7/29/2004	2	VADEQ Comments on the draft Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Site dated April 2004	Letter	M-15	Paul Herman/VADEQ	Sue Fields/NASA
1	0112	01.01.00.0020	9/22/2004	8	NASA Response to Comments from EPA and VADEQ on the draft Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Site dated April 2004	Letter	M-15	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0113	01.01.00.0021	9/23/2004	15	NASA Response to Comments from EPA on the Draft Work Plan for Supplemental Site Investigation as Building E-52, Site 2	Report	2	NASA	Project Team

DVD	ID No.	EPA AR Category and Document	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.							
1	0114	01.01.00.0022	10/6/2004	1	VADEQ Comments on NASA Response to Comments on the Draft Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Comments VADEQ submitted dated July 29, 2004	Letter	M-15	Paul Herman/VADEQ	Sue Fields/NASA
1	0115	01.01.00.0023	10/25/2004	2	EPA Response to Comments for the Work Plan Supplemental Site Investigation Building E-52, Site 2	Letter	2	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0116	01.01.00.0024	11/3/2004	2	EPA Response to Comments for the Draft Site Screening Development for the M-15 Photographic Tank Site dated September 22, 2004.	Letter	M-15	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0117	01.01.00.0025	11/10/2004	3	NASA Response to VADEQ Comments, dated October 6, 2004, on the Draft Summary and Focused Ecological Risk Evaluation Report for Site M-15 Photographic Tanks	Letter	M-15	NASA	Project Team
1	0189	01.01.00.0026	11/16/2004	1	Final Work Plan - Supplemental Site Investigation at Building E-52, Site 2 Submittal Letter	Letter	2	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0190	01.01.00.0027	12/2/2004	2	NASA Response to VADEQ feedback on the M-15 Photo Tank Surface Water Sampling	Letter	M-15	Carolyn Turner/NASA	Project Team
1	0200	01.01.00.0028	12/17/2004	2	Final Summary/Focused Ecological Risk Evaluation Report Supplemental M-15 Photographic Tank Site	Letter	M-15	TtNUS	Sue Fields/NASA
1	0201	01.01.00.0029	12/30/2004	2	VADEQ Response on the Final Summary/Focused Ecological Risk Evaluation Report Supplemental M-15 Photographic Tank Site December 2004	Letter	M-15	Paul Herman/VADEQ	Sue Fields/NASA
1	0202	01.01.00.0030	12/30/2004	2	EPA Response Final Summary/Focused Ecological Risk Evaluation Report M-15 Photographic Tank Site December 2004	Letter	M-15	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0209	01.01.00.0031	5/25/2004	1	EPA Approval of Background Soil and Groundwater Investigation for the Main Base	Letter	MB	Michelle Price- Fay/EPA	Sue Fields/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0210	01.01.00.0032	12/30/2004	1	VADEQ Approval of the Final Summary and Focused Ecological Risk Evaluation Report for M-15 Photographic Tank Site	Letter	M-15	Paul Herman/VADEQ	Sue Fields/NASA
1	0211	01.01.00.0033	2/9/2005	1	EPA Approval of the Final Work Plan for the Supplemental Site Investigation at Building E-52	Letter	2	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0212	01.01.00.0034	3/4/2005	1	VADEQ Approval of the Final Work Plan for the Supplemental Site Investigation at Building E-52	Letter	2	Paul Herman/VADEQ	Sue Fields/NASA
1	0213	01.01.00.0035	4/27/2005	1	VADEQ Response to the Interim Data Report for the Supplemental Site Investigation at Building E-52	Letter	2	Paul Herman/VADEQ	Sue Fields/NASA
1	0214	01.01.00.0036	5/10/2005	1	EPA Response to the Interim Data Report for the Supplemental Site Investigation at Building E-52	Letter	2	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0215	01.01.00.0037	5/11/2005	2	email - confirmation of discussion/agreement regarding additional sampling at Building E-52	Memo	2	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0216	01.01.00.0038	5/11/2005	2	email - NASA response to EPA comments on the Interim Data Report for the Supplemental Site Investigation at Building E-52	Memo	2	Carolyn Turner/NASA	Michelle Price-Fay/EPA
1	0217	01.01.00.0039	5/11/2005	2	VADEQ Comments on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Paul Herman/VADEQ	Sue Fields/NASA
1	0218	01.01.00.0040	5/13/2005	2	email - VADEQ concurrence of the correspondence dated 05/11/05 on the confirmation of discussion/agreement regarding additional sampling at Building E- 52	Memo	2	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0219	01.01.00.0041	6/9/2005	2	EPA Comments on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0220	01.01.00.0042	7/7/2005	8	NASA Response to Comment on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0221	01.01.00.0043	7/8/2005	9	email - NASA Response to Comment on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Memo	M-15	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0222	01.01.00.0044	7/8/2005	2	email - VADEQ Response to NASA's RTC on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Memo	M-15	Paul Herman/VADEQ	Project Team
1	0223	01.01.00.0045	7/11/2005	2	email -NASA Response to VADEQ Response to NASA's RTC on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Memo	M-15	Carolyn Turner/NASA	Project Team
1	0224	01.01.00.0046	7/11/2005	3	email -VADEQ Final Response to NASA's RTCs on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Memo	M-15	Paul Herman/VADEQ	Project Team
1	0225	01.01.00.0047	8/3/2005	1	EPA Concurrence on RTCs on the Draft Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Michelle Price- Fay/EPA	Project Team
1	0226	01.01.00.0048	9/2/2005	1	email - VADEQ Comments on the Final Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Memo	M-15	Paul Herman/VADEQ	Project Team
1	0227	01.01.00.0049	9/26/2005	1	EPA Acceptance of the Final Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0228	01.01.00.0050	10/18/2005	1	VADEQ Acceptance of the Final Ecological Risk Evaluation Letter Work Plan for Site M-15 Photographic Tank	Letter	M-15	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0229	01.01.00.0051	11/10/2005	1	Draft Supplemental Site Investigation Report for Building E-52	Letter	2	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0298	01.01.00.0052	1/12/2006	2	VADEQ Comments on the Draft Supplemental Site Investigation for the Site 2 - Former Building E-52 dated November 2005	Letter	2	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0299	01.01.00.0053	3/14/2006	2	EPA Comments on the Draft Supplemental Site Investigation for the Site 2 - Former Building E-52 dated November 2005	Letter	2	Michelle Price- Fay/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0300	01.01.00.0054	3/30/2006	1	Draft Ecological Risk Evaluation Report M- 15 Photographic Tank Site	Letter	M-15	Carolyn Turner/NASA	Michelle Price-Fay/ EPA
1	0301	01.01.00.0055	3/30/2006	1	Draft Ecological Risk Evaluation Report M- 15 Photographic Tank Site	Letter	M-15	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0302	01.01.00.0056	4/27/2006	9	NASA Response to Remedial Project Manager Comments on the Draft Supplemental Site Investigation Report for Former Building E-52, Site 2	Letter	2	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0303	01.01.00.0057	5/12/2006	1	email - VADEQ Response to NASA's Response to Comments on the Draft Supplemental Site investigation	Letter	2	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0336	01.01.00.0058	8/23/2006	5	WFF response to Remedial Project Manager Comments on the draft Work Plan for the Island Debris Pile Best Management Practice for Waste Characterization and Surface Debris Clearing Activities	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0337	01.01.00.0059	8/23/2006	2	VDEQ comments on Draft Ecological Risk Evaluation Report for Site M-15 Photographic Tank	Letter	M-15	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0338	01.01.00.0060	9/6/2006	1	email: VDEQ comments to NASA Wallops responses concerning the Draft Work Plan for Waste Characterization and Surface Debris Clearing Activities at Site 4 Island Debris Pile	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA Jerry Hoover/EPA
1	0339	01.01.00.0061	9/27/2006	1	Draft Work Plan for SI Activities at the Main Base Firing Range.	Letter	PR	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0340	01.01.00.0062	10/6/2006	2	WFF response to Remedial Project Manager Comments on the Ecological Risk Evaluation Report for the M-15 Photographic Tank Site.	Letter	M-15	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0341	01.01.00.0063	10/6/2006	2	WFF response to Remedial Project Manager Comments on the Ecological Risk Evaluation Report for the M-15 Photographic Tank Site.	Letter	M-15	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0342	01.01.00.0064	10/11/2006	1	VDEQ comments on Final Waste Characterization and Debris Clearing Work Plan for the Island Debris Pile.	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0343	01.01.00.0065	10/25/2006	2	email: NASA WFF Weekly field status report for the Island Debris Pile Site	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ Jerry Hoover/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0344	01.01.00.0066	12/8/2006	1	email: VDEQ comments on RTC's for Ecological Risk Evaluation Report for the M-15 Photographic Tank Site.	Letter	M-15	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0345	01.01.00.0067	12/11/2006	2	VDEQ comments on Draft Work Plan for SI of the Main Base Firing Range Complex.	Letter	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0373	01.01.00.0068	12/28/2006	6	Summary of Waste Characterization Sampling at the Island Debris Pile NASA GSFC WFF	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0374	01.01.00.0069	1/5/2007	2	email: NASA Wallops - Island Debris Pile Waste Characterization Sampling. Re results of conversation with URS.	Letter	2	Theodore Meyer/NASA	Paul Herman/VADEQ Carolyn Turner/NASA
1	0375	01.01.00.0070	1/5/2007	2	email: NASA Wallops - Island Debris Pile Waste Characterization Sampling. Summary of phone conversation re additional samples proposed for the debris pile areas where PCB's and TPH-DRO were found		2	Paul Herman/VADEQ	Theodore Meyer/NASA
1	0376	01.01.00.0071	1/7/2007	7	email: Contractor's comments on the Draft Work Plan and Sampling and Analysis Plan for SI activities for the Main Base Firing Range Complex	Letter	PR	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0377	01.01.00.0072	1/8/2007	3	email: Request for revisions to time table for IDP field activities for Island Debris Pile Waste Characterization Sampling	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0378	01.01.00.0073	1/8/2007	4	email: Approval of requested revisions to time table for IDP field activities for Island Debris Pile Waste Characterization Sampling	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0385	01.01.00.0074	1/8/2007	1	EPA comments on Ecological Risk Evaluation Report for the M-15 Photographic Tank Site	Letter	M-15	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0389	01.01.00.0075	2/7/2007	2	Draft Final Ecological Risk Evaluation Report for the M-15 Photographic Tank Site	Letter	M-15	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0390	01.01.00.0076	2/7/2007	2	Draft Final Ecological Risk Evaluation Report for the M-15 Photographic Tank Site	Letter	M-15	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0391	01.01.00.0077	12/8/2006	1	email: VDEQ no further comments regarding Draft Final Ecological Risk Evaluation Report for the M-15 Photographic Tank Site	Letter	M-15	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0394	01.01.00.0078	1/8/2007	1	EPA reviewed NASA's Response to Comments on the Ecological Risk Evaluation Report for the M-15 Photographic Tank Site submitted via letter dated October 6, 2006	Letter	M-15	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0395	01.01.00.0079	2/9/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Ecological Risk Evaluation Report M-15 Photographic Tank Site	Letter	M-15	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0396	01.01.00.0080	2/22/2007	3	email: Task Order No. 013, NASA Wallops Island, technical review of draft Work Plan and sampling and Analysis Plan for Site Investigation Activities for the Main Base Firing Range Complex	Memo	PR	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0397	01.01.00.0081	3/23/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Site Investigation Work Plan Main Base Firing Range Complex	Letter	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0398	01.01.00.0082	3/26/2007	3	Response to Regulatory Comments on Draft Work Plan for Site Investigation Activities at the Main Base Firing Range at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0399	01.01.00.0083	3/26/2007	3	Response to Regulatory Comments on Draft Work Plan for Site Investigation Activities at the Main Base Firing Range at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Jerry Hoover/EPA Steven Hirsh/EPA
1	0400	01.01.00.0084	4/3/2007	1	email: NASA WFF - Draft Work Plan for SI at Main Base Range Complex- Groundwater	Memo	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0401	01.01.00.0085	4/3/2007	1	email: Draft Work Plan for SI at Main Base Range Complex-Groundwater	Memo	PR	Steven Hirsh/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0402	01.01.00.0086	4/4/2007	1	email: NASA WFF Main Base Firing Range SI WP RTCs	Memo	PR	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0403	01.01.00.0087	4/6/2007	2	email: Draft Work Plan for SI at Main Base Firing Range Complex-Groundwater	Memo	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0404	01.01.00.0088	4/6/2007	3	email: Draft Work Plan for SI at Main Base Range Complex-Groundwater	Memo	PR	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0405	01.01.00.0089	4/6/2007	2	email: Draft Work Plan for SI at Main Base Range Complex-Groundwater	Memo	PR	Carolyn Turner/NASA	Steven Hirsh/EPA Paul Herman\VADEQ
1	0406	01.01.00.0090	5/30/2007	2	Field Summary Report, Waste Characterization and Surface Debris Clearing, Site 4, Island Debris Pile, NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0407	01.01.00.0091	5/30/2007	2	Field Summary Report, Waste Characterization and Surface Debris Clearing, Site 4, Island Debris Pile, NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0408	01.01.00.0092	6/7/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Site Investigation Work Plan and Quality Assurance Project Plan Main Base Firing Range Complex	Letter	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0409	01.01.00.0093	7/3/2007	1	email: NASA Wallops Flight Facility-Final Site Investigation Work Plan for Main Base Firing Range	Memo	PR	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0410	01.01.00.0094	7/6/2007	4	Response to Regulatory Comments on the Final Work Plan for the Site Investigation for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0411	01.01.00.0095	7/6/2007	4	Response to Regulatory Comments on the Final work Plan for the Site Investigation for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0412	01.01.00.0096	7/24/2007	2	Addendum to Final Work Plan and Quality Assurance Project Plan for the Main Base Firing Range Complex Sit at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0413	01.01.00.0097	8/22/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Addendum to Final Work Plan and Quality Assurance Project Plan for the Site Investigation Activities for the Main Base Firing Range Complex	Letter	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0414	01.01.00.0098	8/29/2007	3	NASA Goddard Space Flight Center Wallops Flight Facility Draft Work Plan for Site Investigation Activities and Quality Assurance Project Plan Island debris Pile, Site 4	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0415	01.01.00.0099	10/4/2007	2	email: Site 4	Memo	4	Steven Hirsh/EPA	Theodore Meyer/NASA
1	0416	01.01.00.0100	10/5/2007	1	email: Start of Field Work at Main Base Firing Range	Memo	PR	Theodore Meyer/NASA	Steven Hirsh/EPA Paul Herman\VADEQ
1	0417	01.01.00.0101	10/17/2007	6	Response to Virginia Department of Environmental Quality Comments on the Draft Work Plan for Site Investigation Activities and Quality Assurance Project Plan Island Debris Pile, Site 4	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0418	01.01.00.0102	10/29/2007	2	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments for Draft Work Plan for Site Investigation Activities and Quality Assurance Project Plan Island debris Pile, Site 4	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0419	01.01.00.0103	11/5/2007	6	email: NASA WFF Work Plan for Additional Site Investigation Activities at the Main Base Firing Range Complex	Memo	PR	Carolyn Turner/NASA	Steven Hirsh/EPA Paul Herman\VADEQ
1	0420	01.01.00.0104	11/9/2007	4	email: NASA WFF MBFR Site Phase II Field Summary	Memo	PR	Carolyn Turner/NASA	Steven Hirsh/EPA Paul Herman\VADEQ
1	0421	01.01.00.0105	11/19/2007	2	Response to Regulatory Comments for the Site 4, Island Debris Pile Site Investigation Work Plan and Quality Assurance Project Plan, NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0422	01.01.00.0106	1/31/2008	2	Final Site 4, Island Debris Pile Site Investigation Work Plan and Revision 1 of the Quality Assurance Project Plan, NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0423	01.01.00.0107	1/31/2008	2	Final Site 4, Island Debris Pile Site Investigation Work Plan and Revision 1 of the Quality Assurance Project Plan, NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0424	01.01.00.0108	2/20/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Revised Draft Work Plan and Quality Assurance Project Plan Site Investigation Activities at Island Debris Pile, Site 4	Letter	4	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0425	01.01.00.0109	2/21/2008	1	email: Main Base Firing Range Site Investigation Report	Memo	PR	Paul Herman/VADEQ	Theodore Meyer/NASA Steven Hirsh/EPA
2	0426	01.01.00.0110	2/21/2008	1	email: Main Base Firing Range Site Investigation Report	Memo	PR	Theodore Meyer/NASA	Steven Hirsh/EPA Paul Herman\VADEQ
2	0427	01.01.00.0111	3/13/2008	1	Draft Work Plan and QAPP for Site Investigation Activities at Island Debris Pile, Site 4	Letter	4	Dawn Fulsher/EPA	Carolyn Turner/NASA
2	0428	01.01.00.0112	3/27/2008	1	Final Site 4, Island Debris Pile Site Investigation Work Plan and Quality Assurance Project Plan NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0429	01.01.00.0113	3/27/2008	1	Final Site 4, Island Debris Pile Site Investigation Work Plan and Quality Assurance Project Plan NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	4	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0430	01.01.00.0114	3/31/2008	1	Draft Site Investigation Report for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's. wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0431	01.01.00.0115	3/31/2008	1	Draft Site Investigation Report for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's. wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0548	01.01.00.0116	5/21/2008	3	NASA Goddard Space Flight Center Wallops Flight Facility Draft Site Investigation Report Main Base Firing Range Complex	Letter	PR	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0549	01.01.00.0117	5/22/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments/Change Pages - Final remedial Investigation Report Sites 005 and 012	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0550	01.01.00.0118	6/3/2008	2	Draft SI for the Firing Range Complex	Letter	PR	Carolyn Turner/NASA	Dawn Fulsher/EPA
2	0560	01.01.00.0119	7/3/2008	2	Proposed Site 4 Supplemental Sampling	email	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA Steven Hirsh/EPA
2	0561	01.01.00.0120	7/9/2008	1	Site 4, Island Debris Pile Site Investigation Proposed Additional Sampling	email	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA Steven Hirsh/EPA
2	0562	01.01.00.0121	7/15/2008	17	Response to Regulatory Comments on the Draft Main base Firing Range Complex Site Investigation Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0563	01.01.00.0122	7/15/2008	15	Response to Regulatory Comments on the Draft Main base Firing Range Complex Site Investigation Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	PR	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0622	01.01.00.0123	8/13/2008	2	Response to Comments for Draft Site Investigation Report fro Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0623	01.01.00.0124	8/22/2008	1	Response to Comments for Draft Site Investigation Report fro Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0624	01.01.00.0125	9/29/2008	6	Response to Regulatory Comments on the Response to Comments for Draft Site Investigation Report fro Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0625	01.01.00.0126	9/29/2008	6	Response to Regulatory Comments on the Response to Comments for Draft Site Investigation Report fro Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0626	01.01.00.0127	10/27/2009	1	Response to Regulatory Comments on NASA Response to Comment Letter for Draft Site Investigation Report for Main Base Firing Range Complex	Letter	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0627	01.01.00.0128	1/6/2009	1	Final Site Investigation Report for Main Base Firing Range Complex, NASA Wallops Flight Facility	email	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0628	01.01.00.0129	1/8/2009	1	Final Site Investigation Report for Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0629	01.01.00.0130	2/13/2009	2	Comments for Draft Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0630	01.01.00.0131	2/23/2009	2	Comments for Draft Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0631	01.01.00.0132	3/6/2009	1	Final Site Investigation Report for Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0632	01.01.00.0133	3/20/2009	5	Response to Comments for Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0633	01.01.00.0134	3/20/2009	5	Response to Comments for Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0634	01.01.00.0135	3/31/2009	1	Response to Comments Acceptance for Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0635	01.01.00.0136	4/24/2009	1	Final Site Investigation Report for Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0636	01.01.00.0137	4/28/2009	1	Response to Comments Acceptance for Site Investigation Report, Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0667	01.01.00.0138	8/4/2009	1	email: VDEQ concurrence with the Letter Work Plan for PCE Investigation at Site 9 (issued 7/30/09)	email	9	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0780	01.01.00.0139	8/19/2009	1	Lead Sampling Results, Main Base Firing Range (MNFR) Complex	Letter	MBFRC	Garth Glenn/Tetra Tech NUS	Theodore J. Meyer/NASA
2	0781	01.01.00.0140	6/24/2010	1	RE: Draft Meeting Minutes for May 7, 2010 Teleconference on Wallops Island South End Disposal Area	email	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	0782	01.01.00.0141	2/7/2011	1	Site Specific Report for South End disposal Area at NASA	Letter	SEDA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0783	01.01.00.0142	2/7/2011	1	Site Specific Report for South End disposal Area at NASA	Letter	SEDA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0784	01.01.00.0143	2/7/2011	1	Site Specific Report for South End disposal Area at NASA	Letter	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0785	01.01.00.0144	5/10/2011	1	Draft Preliminary Assessment for South End Disposal Area	Letter	SEDA	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0960	01.01.00.0145	7/14/2011	2	Comments for Draft Preliminary Assessment for the South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0961	01.01.00.0146	9/23/2011	2	Comments for Draft Preliminary Assessment for the South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0962	01.01.00.0147	11/22/2011	8	Email: Response to Comments Draft Preliminary Assessment for the South End Disposal Area, NASA Wallops Flight Facility	Memo	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1014	01.01.00.0148	5/30/2012	1	Transmittal of Draft Final Preliminary Assessment for the South End Disposal Area, NASA Wallops Flight Facility and NASA's Response to Comments to EPA and VDEQ	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1015	01.01.00.0149	7/3/2012	1	Final Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1016	01.01.00.0150	7/3/2012	1	Final Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1017	01.01.00.0151	7/3/2012	1	Final Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1018	01.01.00.0152	9/11/2012	17	Response to Comments for Final Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1019	01.01.00.0153	9/12/2012	1	Response to Comments EPA Acceptance on NASA's response to EPA's comments on the Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	email	SEDA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1020	01.01.00.0154	9/19/2012	1	Response to Comments VDEQ Acceptance on the Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	email	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1021	01.01.00.0155	9/19/2012	4	Response to Comments VDEQ Acceptance on NASA's follow-on response to VDEQs comment.	email	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1022	01.01.00.0156	9/28/2012	1	Final Soil and Groundwater Sampling and Analysis Plan for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1023	01.01.00.0157	9/28/2012	1	Final Preliminary Assessment for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1024	01.01.00.0158	9/28/2012	1	Final Preliminary Assessment for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1025	01.01.00.0159	9/28/2012	1	Final Preliminary Assessment for South End Disposal Area, NASA Wallops Flight Facility	Letter	SEDA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1110	01.01.00.0160	10/19/2012	1	EPA has reviewed and confirmed that all of EPA's comments have been addressed and incorporated into the Final South End Disposal Area SAP Report. The agency considers this report to be final.	email	SEDA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1111	01.01.00.0161	11/5/2012	1	VDEQ offers no further comment and considers the Final Preliminary Assessment, South End Disposal Area to be final.	Letter	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1148	01.01.00.0162	4/1/2013	1	Draft Site Screening Report for SEDA at NASA Goddard Space Flight Center	Letter	SEDA	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	1149	01.01.00.0163	4/1/2013	1	Draft Site Screening Report for SEDA at NASA Goddard Space Flight Center	Letter	SEDA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1150	01.01.00.0164	4/1/2013	1	Draft Site Screening Report for SEDA at NASA Goddard Space Flight Center	Letter	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1151	01.01.00.0165	4/22/2013	1	Draft Site Screening Report for SEDA at NASA Goddard Space Flight Center	Letter	SEDA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1152	01.01.00.0166	6/21/2013	1	Draft Site Screening Report for SEDA at NASA Wallops Flight Facility	Letter	SEDA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1153	01.01.00.0167	8/16/2013	1	SEDA Report - RTCs and red-line Final Version	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1213	01.01.00.168	8/26/2014	1	Site Summary Status Report for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's WFF	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1214	01.01.00.169	8/26/2014	1	Site Summary Status Report for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's WFF	Letter	MBFRC	David Liu/NASA	Lisa Denmark/EPA
2	1215	01.01.00.170	8/26/2014	1	Site Summary Status Report for the Main Base Firing Range Complex at NASA, Goddard Space Flight Center's WFF	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1216	01.01.00.171	10/16/2014	2	Aircraft Gun Testing Range Proposed Sampling	email	MBFRC	Steven Hirsh/EPA	David Liu/NASA
2	1217	01.01.00.172	10/15/2014	2	Aircraft Gun Testing Range Proposed Sampling, attached Figure 1 proposed sample locations aircraft gun testing range	email	MBFRC	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1218	01.01.00.173	10/15/2014	2	Aircraft Gun Testing Range Proposed Sampling	email	MBFRC	Paul Herman/VADEQ	David Liu/NASA
2	1219	01.01.00.174	10/24/2014	3	NASA Goddard Space Flight Center - WFF, Draft Site Summary and Risk Re- evaluation Report, Main Base Firing Range Complex (Pistol and Rifle)	Letter	MBFRC	Paul Herman/VADEQ	David Liu/NASA
2	1220	01.01.00.175	10/29/2014	2	Site Summary and Risk Re-evaluation Report for MBFR	email	MBFRC	Lisa Denmark/EPA	David Liu/NASA
2	1221	01.01.00.176	10/30/2014	1	Additional Comments on the Pistol and Rifle Ranges	email	MBFRC	Lisa Denmark/EPA	David Liu/NASA
2	1222	01.01.00.177	11/21/2014	8	NASA WFF, Draft Site Summary and Risk Re-evaluation Report, Main Base Firing Range Complex (Pistol and Rifle) - attachment RTC DEQ pisotl and rifle risk re-eval	email	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1223	01.01.00.178	11/21/2014	4	Site Summary and Risk Re-evaluation Report for MBFR - attachment RTC EPA pistol and rifle risk re-eval	email	MBFRC	David Liu/NASA	Lisa Denmark/EPA
2	1277	01.01.00.0179	8/21/2014	1	Work Plans for Site Screening of Area of Interest 20 and north Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, VA	Letter	AI20/NIT	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1278	01.01.00.0180	8/21/2014	1	Work Plans for Site Screening of Area of Interest 20 and north Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, VA	Letter	AI20/NIT	David Liu/NASA	Steve Hirsh/EPA
2	1279	01.01.00.0181	8/21/2014	1	Work Plans for Site Screening of Area of Interest 20 and north Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, VA	Letter	AI20/NIT	David Liu/NASA	Paul Herman/VADEQ
2	1280	01.01.00.0182	8/29/2014	2	NASA Goddard Space Flight Center Wallops Flight Facility, Draft Work Plans for Site Screening Area of Interest 20 - Island Transformers	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1281	01.01.00.0183	9/8/2014	1	Comments on the AI-20 and North Island Transformers	email	AI20/NIT	Lisa Denmark/EPA	David Liu/NASA
2	1282	01.01.00.0184	9/15/2014	2	NASA Goddard Space Flight Center Wallops Flight Facility, Draft Work Plans for Site Screening North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1283	01.01.00.0185	9/19/2014	5	NASA WFF - Draft Work Plan for Site Screening of North Island Transformers	email	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1284	01.01.00.0186	9/19/2014	2	Comments on the AI-20 and North Island Transformers	email	AI20/NIT	David Liu/NASA	Lisa Denmark/EPA
2	1285	01.01.00.0187	9/19/2014	4	NASA Wallops Flight Facility - Draft Work Plan for Site Screening at Area of Interest 20	email	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1286	01.01.00.0188	9/23/2014	1	Comments on the AI-20 and North Island Transformers	email	AI20/NIT	Lisa Denmark/EPA	David Liu/NASA
2	1287	01.01.00.0189	9/23/2014	2	NASA WFF - Draft Work Plan for Site Screening at Area of Interest 20	email	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1288	01.01.00.0190	9/23/2014	2	NASA WFF - Draft Work Plan for Site Screening of North Island Transformers	email	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1289	01.01.00.0191	9/30/2014	1	Final Work Plan for Site Screening at Area of Interest 20 and North Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	AI20/NIT	David Liu/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1290	01.01.00.0192	9/30/2014	1	Final Work Plan for Site Screening at Area of Interest 20 and North Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	AI20/NIT	David Liu/NASA	Lisa Denmark/EPA
2	1291	01.01.00.0193	9/30/2014	1	Final Work Plan for Site Screening at Area of Interest 20 and North Island Transformers at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	AI20/NIT	David Liu/NASA	Steve Hirsh/EPA
2	1292	01.01.00.0194	10/2/2014	1	NASA Goddard Space Flight Center Wallops Flight Facility, Final Work Plan for Site Screening Area of Interest 20 - Island Transformers	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1293	01.01.00.0195	10/2/2014	1	NASA Goddard Space Flight Center Wallops Flight Facility, Final Work Plans for Site Screening North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1294	01.01.00.0196	10/3/2014	14	Section 106 Compliance for NASA Wallops Flight Facility (WFF) North Wallops Island Transformer Site Screening and Potential Soil Remediation	Letter	NIT	Randall Stanley/NASA	Amanda Lee/DHR
2	1295	01.01.00.0197	10/28/2014	1	Transformer Sampling	email	AI20/NIT	David Liu/NASA	Paul Herman/VADEQ
2	1296	01.01.00.0198	11/13/2014	4	AI-20 Field Change	email	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1297	01.01.00.0199	11/14/2014	1	AI-20 Field Change	email	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1298	01.01.00.0200	11/14/2014	1	AI-20 Field Change	email	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1317	01.01.00.0201	2/12/2014	3	SEDA Report - RTCs and red-line Final Version	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA,Lisa Johnson/EPA
2	1318	01.01.00.0202	2/12/2014	5	SEDA Report - red-line Final Version	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1366	01.01.00.0203	3/5/2015	1	Final - Site Summary and Risk Re- Evaluation for MBFR Complex at NASA WFF	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1367	01.01.00.0204	3/5/2015	1	Final - Site Summary and Risk Re- Evaluation for MBFR Complex at NASA WFF	Letter	MBFRC	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1368	01.01.00.0205	3/5/2015	1	Final - Site Summary and Risk Re- Evaluation for MBFR Complex at NASA WFF	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA
2	1369	01.01.00.0206	3/13/2015	1	Draft AGTR Work Plan	email	MBFRC	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA,Lisa Johnson/EPA
2	1370	01.01.00.0207	3/18/2015	1	Draft AGTR Work Plan	email	MBFRC	Lisa Denmark/EPA	David Liu/NASA
2	1371	01.01.00.0208	3/31/2015	1	Final - Site Summary and Risk Re- Evaluation for MBFR Complex at NASA GSFC WFF	Letter	MBFRC	Paul Herman/VADEQ	David Liu/NASA
2	1372	01.01.00.0209	4/20/2015	3	RTC VDEQ - Draft AGTR Work Plan	email	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1373	01.01.00.0210	4/20/2015	3	RTC EPA - AGTR Work Plan	email	MBFRC	David Liu/NASA	Lisa Denmark/EPA
2	1374	01.01.00.0211	4/21/2015	1	Draft AGTR Work Plan	email	MBFRC	Paul Herman/VADEQ	David Liu/NASA
2	1375	01.01.00.0212	6/16/2015	1	Draft - EE/CA for the MBFR Complex at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA
2	1376	01.01.00.0213	6/16/2015	1	Draft - EE/CA for the MBFR Complex at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Lisa Denmark/EPA
2	1377	01.01.00.0214	6/16/2015	1	Draft - EE/CA for the MBFR Complex at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1378	01.01.00.0215	7/27/2015	1	Draft - Data Summary Report for the Rifle Range and Aircraft Gun Testing Range at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA
2	1379	01.01.00.0216	7/27/2015	1	Draft - Data Summary Report for the Rifle Range and Aircraft Gun Testing Range at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Lisa Denmark/EPA
2	1380	01.01.00.0217	7/27/2015	1	Draft - Data Summary Report for the Rifle Range and Aircraft Gun Testing Range at NASA GSFC WFF	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
2	1388	01.01.00.0218	2/20/2015	1	Draft AI-20 Site Screening Report	email	AI20	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1389	01.01.00.0219	2/24/2015	1	Draft NIT Site Screening Report	email	NIT	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1390	01.01.00.0220	2/24/2015	1	Draft NIT Site Screening at Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Lisa Denmark/EPA
2	1391	01.01.00.0221	2/24/2015	1	Draft NIT Site Screening at Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1392	01.01.00.0222	2/24/2015	1	Draft NIT Site Screening at Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1393	01.01.00.0223	3/5/2015	1	Draft Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1394	01.01.00.0224	3/5/2015	1	Draft Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1395	01.01.00.0225	3/5/2015	1	Draft Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA
2	1434	01.01.00.0226	3/13/2015	1	Draft Work Plan for Site Characterization at North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1435	01.01.00.0227	3/13/2015	1	Draft Work Plan for Site Characterization at North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA
2	1436	01.01.00.0228	3/13/2015	1	Draft Work Plan for Site Characterization at North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1437	01.01.00.0229	3/24/2015	1	Comments on Draft Site Screening Report NIT	email	NIT	Lisa Denmark/EPA	David Liu/NASA
2	1438	01.01.00.0230	3/24/2015	1	Comments on Work Plan for NIT 1 and NIT-17	email	NIT	Lisa Denmark/EPA	David Liu/NASA
2	1439	01.01.00.0231	3/25/2015	1	Draft NIT-1 & NIT-17 Site Characterizaiton Work Plan	email	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1440	01.01.00.0232	3/30/2015	3	Draft Site Screening Report North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1441	01.01.00.0233	4/14/2015	1	AI-20 Site Screening Comments	email	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1442	01.01.00.0234	4/23/2015		AI-20 EPA RTC; AI-20 VDEQ RTC	email	AI20	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1443	01.01.00.0235	4/23/2015		EPA RTCs2 NIT Work Plan; VDEQ RTCs2 NIT Work Plan; redline Final NIT- 117 char Work Plan	email	NIT	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1444	01.01.00.0236	5/5/2015		AI-20 SSP EPA Follow On RTC	email	Al20	David Liu/NASA	Lisa Denmark/EPA
2	1445	01.01.00.0237	5/5/2015		AI-20 Site Screening Report RTC and Redline	email	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1446	01.01.00.0238	5/11/2015	1	AI-20 Site Screening Report RTC and Redline	email	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1447	01.01.00.0239	5/11/2015	1	AI-20 Site Screening Report RTC and Redline	email	AI20	Paul Herman/VADEQ	David Liu/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1448	01.01.00.0240	5/22/2015	1	Final Site Screening Report for Area of Interest 20	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1449	01.01.00.0241	6/16/2015	1	Final Work Plan for Soil Characterization at North Island Transformer NIT-1 and NIT- 17 at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA
2	1450	01.01.00.0242	6/16/2015	1	Final Work Plan for Soil Characterization at North Island Transformer NIT-1 and NIT- 17 at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1451	01.01.00.0243	6/16/2015	1	Final Work Plan for Soil Characterization at North Island Transformer NIT-1 and NIT- 17 at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1452	01.01.00.0244	6/25/2015	1	Draft Supplemental Site Screening Work Plan Addendum at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1453	01.01.00.0245	6/25/2015	1	Draft Supplemental Site Screening Work Plan Addendum at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1454	01.01.00.0246	6/25/2015	1	Draft Supplemental Site Screening Work Plan Addendum at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA
2	1455	01.01.00.0247	7/16/2015	1	Final Soil Charaacterization Work Plan North Island Transformer NIT-1 and NIT- 17	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
2	1456	01.01.00.0248	7/16/2015	1	Draft Supplemental Site Screening Work Plan Addendum at the North Island Transformers at NASA GSFC WFF	email	NIT	Lisa Denmark/EPA	David Liu/NASA
2	1457	01.01.00.0249	8/10/2015	1	Final Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1458	01.01.00.0250	8/10/2015	1	Final Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1459	01.01.00.0251	8/10/2015	1	Final Site Screening at the North Island Transformers at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1460	01.01.00.0252	7/29/2015	1	Final Nit Supplemental Sampling Work Plan	email	NIT	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1492	01.01.00.0253	6/12/2015	3	NASA GSFC WFF, Study Area Screening Evaluation, Former Navy Sites	Letter	WFF	Paul Herman/VADEQ	David Liu/NASA
2	1493	01.01.00.0254	6/17/2015	1	NASA WFF - Study Area Screening Evaluation EPA Comments	email	WFF	Lisa Denmark/EPA	David Liu/NASA
2	1494	01.01.00.0255	7/20/2015	1	NASA WFF - Study Area Screening Evaluation RTCs (EPA and VADEQ)	email	WFF	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
	1500	01.01.00.0256	8/13/2015	1	NASA WFF -Draft Data Screening Summary Report Rifle and Air Gun Testing Range	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1501	01.01.00.0257	2/29/2016	1	Final Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1502	01.01.00.0258	12/8/2015	1	Draft Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1503	01.01.00.0259	12/8/2015	1	Draft Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1504	01.01.00.0260	2/29/2016	1	Final Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1505	01.01.00.0261	3/25/2016	1	Final Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1573	01.01.00.0272	11/25/2016	1	Final Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1584	01.01.00.0262	6/1/2016	1	WFF FUDS Draft Project 11 17-SASE	Letter	WFF	David Liu/NASA	Lorie Baker, Steve Hirsh/EPA/Paul Herman/VADEQ
	1598	01.01.00.0263	9/13/2016	1	NASA Wallops Flight Facility - Draft Work Plan for Site Investigation at Buildings F- 10A, F-10B, N-166	Letter	WFF	David Liu/NASA	Steve Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1599	01.01.00.0264	9/13/2016	1	NASA Wallops Flght Facility - Draft Work Plan for Site Investigaton at Buildings F- 10A, F-10B, N-166	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1600	01.01.00.0265	9/13/2016	1	NASA Wallops Flight Facility - Draft Work Plan for Site Investigation at Buildings F- 10A, F-10B, N-166	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1626	01.01.00.0266	12/9/2016	1	NASA Wallops Flight Facility - Final Project 11 and 17 Areas of Interest Study Area Screening Evaluation	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1627	01.01.00.0267	12/9/2016	1	NASA Wallops Flight Facility - Final Project 11 and 17 Areas of Interest Study Area Screening Evaluation	Letter	WFF	David Liu/NASA	Steve Hirsh/EPA
	1628	01.01.00.0268	12/9/2016	1	NASA Wallops FlightFacility - Final Project 11 and 17 Areas of Interest Study Area Screening Evaluation	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1629	01.01.00.0269	12/21/2016	1	Final Work Plan for Site Investigation at Buildings F-10A, F-10B, N-166, and the former Circular Area at NASA Goddard Flight Center	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1630	01.01.00.0270	12/21/2016	1	Final Work Plan for Site Investigation at Buildings F-10A, F-10B, N-166, and the former Circular Area at NASA Goddard Flight Center	Letter	WFF	David Liu/NASA	Steve Hirsh/EPA
	1631	01.01.00.0271	12/21/2016	1	Final Work Plan for Site Investigation at Buildings F-10A, F-10B, N-166, and the former Circular Area at NASA Goddard Flight Center	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1670	01.01.00.0273	11/25/2016	1	Final Work Plan for the Groundvvater Investigation for Perfluorinated Compounds at Fonner Fire Training Area	Letter	FFTA	Lorie Baker/EPA	David Liu/NASA
				04.021	Dre Demodial Investigation Proliminary A	aaaamant F			
1	0005	01.02.00.0001	4/14/1988	14	Pre-Remedial Investigation Preliminary A Preliminary Assessment Report for Wallops Flight Facility (WFF), National Aeronautics and Space Administration, Wallops Island, Virginia, undated	Report	WFF		
1	0006 0007	01.02.00.0002	8/1/1994	371 381	Environmental Resources Document Environmental Resource Document	Report Boport	WFF WFF	Metcalf & Eddy, Inc. Occu-Health, Inc.	NASA NASA
	0007	01.02.00.0003	10/1999	301	Environmental Resource Document	Report	VVFF		NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0118	01.02.00.0004	12/23/2003	288	Final Desktop Audit Summary Report for the Site Screening Process	Report	WFF	MicroPact/COE	NASA
2	1026	01.02.00.0005	9/25/2012	273	Preliminary Assessment Report for South End Disposal Area, Wallops Flight Facility (WFF), National Aeronautics and Space Administration, Wallops Island, Virginia, July 2012	Report	SEDA	Tetra Tech, Inc.	NASA
	1506	01.02.00.0006	2/1/2016	279	Final Technical Memorandum for Supplemental Site Screening at Nine North Island Transformer Locations	•	NIT	Tetra Tech, Inc.	NASA
	I			01.	03 Pre-Remedial Investigation Site Invest	igation Docu	uments		
1	0008	01.03.00.0001	2/1/1989	51	NASA Site Inspection for Goddard Space Flight Center and WFF, Statement of Work for Soil Borings and Well Installations	WP	WFF	EBASCO Services, Inc.	NASA
1	0009	01.03.00.0002	3/1/1989	61	Site Inspection Goddard Space Flight Center Field Sampling Plan	WP	WFF	EBASCO Services, Inc.	NASA
1	0010	01.03.00.0003	1/1/1990	155	Final Site Inspection NASA, Volumes I and II	Report	WFF	EBASCO Services, Inc.	
1	0011	01.03.00.0004	9/1/1990	28	Final Report Soil Gas and PCB Screen; Waste Oil Dump; Scrapyard; PCB Transformer	Report	WFF	EBASCO Services, Inc.	NASA
1	0012	01.03.00.0005	9/26/1991	44	Detection Limits/Analytical Methods for All Analyses: TCL Volatiles, semi-Volatiles, Pesticides/PCB's and TAL Metals and Cyanide	Letter	WFF	Teresa Spagnuolo/NASA	Jane Pilllips/Metcalf & Eddy
1	0013	01.03.00.0006	5/1/1992	142	Quality Assurance/Quality Control Plan; Revision of Site Investigation	WP	WFF	Metcalf & Eddy, Inc.	NASA
1	0014	01.03.00.0007	5/1/1992	98	Field Sampling and Analysis Plan, Revision of Site Investigation	WP	WFF	Metcalf & Eddy, Inc.	NASA
1	0015	01.03.00.0008	8/1/1992	227	Final Report; Revision of Site Investigation Vol. I	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0016	01.03.00.0009	8/1/1992	330	Final Report; Revision of Site Investigation Vol. II - References	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0017	01.03.00.0010	8/1/1992	474	Final Report; Revision of Site Investigation Vol. IV - References	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0018	01.03.00.0011	8/22/1995	469	Final Site Inspection Work Plan	WP	WFF	Metcalf & Eddy, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0019	01.03.00.0012	5/1/1996	30	Aerial Photographic Analysis NASA - Wallops Flight Facility, Wallops Island, Virginia	Report	WFF	G. I. Martucci/ Lockheed Environmental Systems & Technologies Co./EPA/ORD	EPA Hazardous Waste Mgm. Div. Reg. 3, Phila, PA/Office of Emergency and Remedial Response, Wash, DC
1	0020	01.03.00.0013	3/27/1996	512	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume I, Site Inspection Report	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0021	01.03.00.0014	3/27/1996	155	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume II, Preliminary Reports, Phases I-II, Field Surveys	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0022	01.03.00.0015	3/27/1996	407	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume III, Preliminary Reports, Phases III-IV, Field Sampling	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0023	01.03.00.0016	3/27/1996	180	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume IV, Preliminary Reports, HRS Scoring	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0024	01.03.00.0017	3/27/1996	435	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume V, Preliminary Reports, HRS PRESCORE Output	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0025	01.03.00.0018	3/27/1996	1168	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume VI, Preliminary Report, HRS PRESCORE Output	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0026	01.03.00.0019	3/27/1996	92	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume VII, Preliminary Report, EPA HRS PRESCORE Software and Manual	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0027	01.03.00.0020	3/27/1996	425	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume VIII, Preliminary Reports, References	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0028	01.03.00.0021	3/27/1996	699	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume IX, Preliminary Report, References	Report	WFF	Metcalf & Eddy, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0029	01.03.00.0022	3/27/1996	847	Site Inspection for Miscellaneous Sites at Wallops Flight Facility, Volume X, Preliminary Report, References	Report	WFF	Metcalf & Eddy, Inc.	NASA
1	0030	01.03.00.0023	11/1/2000	36	Wallops Flight Facility - Main Base GIS Based Historical Photographic Analysis 1938-1980	Report	WFF	U.S. Army Corps of Engineers, Norfolk District	NASA
1	0031	01.03.00.0024	7/31/2001	95	Site Investigation Report ADAS Facility Site 10	Report	10	Versar, Inc.	NASA
1	0032	01.03.00.0025	1/14/2003	12	Letter Work Plan for Supplemental Investigations Advanced Data Acquisition Support Facility (ADAS) NASA WFF, Wallops Main Base, NASA, WFF, Wallops Island, Virginia	Letter Report	10	Sue Fields/NASA	Mark Leeper/VADEP and Todd M. Richardson/USEPA
1	0033	01.03.00.0026	2/20/2003	7	Final letter Work Plan, Potable Water Supply Well Sampling	WP	WFF	Tetra Tech NUS, Inc. (TtNUS)	NASA
1	0034	01.03.00.0027	4/8/2003	151	Final Letter Report, Potable Water Supply Well Sampling	Letter Report	WFF	TtNUS	NASA
1	0035	01.03.00.0028	9/1990	206	Final Summary Report, Scrapyard, PCB Transformer, Photographic Tank, Waste Oil Dump	Report	WFF	EBASCO Services, Inc.	NASA
1	0119	01.03.00.0029	4/20/1999	18	Limited Site Characterization Report	Report	WFF	COE	NASA
1	0120	01.03.00.0030	5/1/2003	286	Limited Site Investigation at Wallops Flight Facility	Report	WFF	SAIC/COE	NASA
1	0121	01.03.00.0031	10/3/2003	51	Final Site Screening Document for M-15 Photographic Tank (Photo Tank) Site	Report	M-15	TtNUS	NASA
1	0122	01.03.00.0032	11/9/2004	93	Work Plan for Supplemental Site Investigation Building E-52, Site 2	Report	2	TtNUS	NASA
1	0191	01.03.00.0033	3/1/2004	67	Arial Photographic Analysis of NASA Wallops Flight Facility Site	Report	WFF	EPA	
1	0230	01.03.00.0034	4/20/2005	16	Interim Data Report for the Supplemental Site Investigation at Building E-52	Report	2	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0346	01.03.00.0035	8/21/2006	791	Supplemental SI Report former Building E- 52, Site 2	Report	2	TtNUS	NASA
1	0347	01.03.00.0036	9/8/2006	363	Work Plan, Site Safety & Health Plan and Sampling & Analysis Plan for the Island Debris Pile Best Management Practice for Waste Characterization and Surface Debris Clearing Activities	WP	4	EG&G	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0432	01.03.00.0037	5/1/2007	54	Quality Assurance Project Plan for Site Investigation Activities at the Main Base Firing Range Complex NASA Wallops Flight Facility Wallops Island, Virginia	WP	PR	TtNUS	NASA
1	0433	01.03.00.0038	5/1/2007	218	Work Plan for Site Investigation Activities at the Main Base Firing Range Complex NASA Wallops Flight Facility Wallops Island, Virginia	WP	PR	TtNUS	NASA
1	0434	01.03.00.0039	5/21/2007	529	Site 4 Island Debris Pile Field Summary Report Waste Characterization Sampling and Surface Debris Clearing	Report	4	URS/EG&G	NASA
2	0435	01.03.00.0040	1/1/2008	224	Work Plan and Quality Assurance Project Plan for Site Investigation Activities at Island Debris Pile, Site 4 NASA Wallops Flight Facility Wallops Island, Virginia	WP	4	TtNUS	NASA
2	0564	01.03.00.0041	7/3/2008	4	Proposed additional sampling Site Investigation at Site 4, Island Debris Pile for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter WP	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0565	01.03.00.0042	7/3/2008	3	Proposed additional sampling Site Investigation at Site 4, Island Debris Pile for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter WP	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0664	01.03.00.0043	11/1/2008	2510	Final Site Inspection Report for Main Base Firing Range Complex, NASA Wallops Flight Facility	Report	MBFRC	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	0665	01.03.00.0044	2/1/2009	2510	Final Site Inspection Report - Revision I for Main Base Firing Range Complex, NASA Wallops Flight Facility	Report	MBFRC	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	0666	01.03.00.0045	4/1/2009	252	Final Site Inspection Report for Site 4 - Island Debris Pile, NASA Wallops Flight Facility	Report	4	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	0727	01.03.00.0046	7/30/2009	3	Final Work Plan, Additional Site Investigation Activities Main Base PCE Occurrence for NASA WFF	WP	9	Tetra Tech NUS, Inc. (TtNUS)	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0786	01.03.00.0047	8/15/2009	31	Summary Report, Main Base Firing Range (MBFR) Complex - Skeet Range : Lead Follow-up soil Sampling	Report	MBFRC	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	0833	01.03.00.0048	1/1/2011	146	South End Disposal Area - Site Specific Final Report	Report	SEDA	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	1299	01.03.00.0049	10/9/2014	35	Revised Final Work plan for Site Screening at North Island Transformers	WP	NIT	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	1300	01.03.00.0050	9/30/2014	40	Final Work plan for Site Screening at Area of Interest 20	WP	AI20	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	1319	01.03.00.0051	2/1/2014	338	Final Site Screening Report - South End Disposal Area	Report	SEDA	Tetra Tech NUS, Inc. (TtNUS)	NASA
2	1365	01.03.00.0052	2/25/2015	102	Final - Site Summary and Risk Re- Evaluation Report for the MBFR Complex	Report	MBFRC	Tetra Tech, Inc	NASA
2	1381	01.03.00.0053	4/20/2015	12	Final - Letter Work Plan AGTR Work Investigation, NASA WFF	WP	MBFRC	Tetra Tech, Inc	NASA
2	1461	01.03.00.0054	7/29/2015		Final NIT Supplemental Sampling Work Plan	WP	NIT	Tetra Tech, Inc	NASA
2	1463	01.03.00.0055	5/12/2015	103	Final Site Screening at Area of Interest 20 NASA Wallops Flight Facility Wallops Island, Virginia	Report	AI20	Tetra Tech, Inc	NASA
2	1464	01.03.00.0056	6/4/2015	46	Final Work Plan Soil Characterization North Island Transformers NIT-1 and NIT- 17	Report	NIT	Tetra Tech, Inc	NASA
2	1465	01.03.00.0057	8/5/2015	153	Final Site Screening Report North Island Transformers	Report	NIT	Tetra Tech, Inc	NASA
				01	.04 Pre-Remedial Investigation Expanded	d Site Investi	gation		
1	0036	01.04.00.0001	1/14/2003	100	Final Letter Work Plan, Background Soil and GW Investigation for the Main Base, NASA, WFF, Wallops Island, Virginia	WP	WFF	Sue Fields/NASA	Mark Leeper/VADEP and Todd M. Richardson/USEPA
1	0037	01.04.00.0002	7/10/2003	66	Summary Site Characterization Report for Wallops Island Fueling Station VADEQ Case No. PC# 93-0913 (Site 6, Building X- 5 and X-10)	Report	WFF	TtNUS	NASA
1	0123	01.04.00.0003	5/17/2004	993	Final Background Soil and Groundwater Investigation Report for the Main Base	Report	MB	TtNUS	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0203	01.04.00.0004	12/29/2004	332	Final Summary and Focused Ecological Risk Evaluation Report Supplemental M- 15 Photographic Tank Site	Report	M-15	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0231	01.04.00.0005	8/31/2005	231	Final Ecological Risk Evaluation Letter Work Plan for the M-15 Photographic Tank	Report	M-15	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0436	01.04.00.0006	1/1/2007	255	Ecological Risk Evaluation Report M-15 Photographic Tank Site NASA Wallops Flight Facility Wallops Island, Virginia	Report	M-15	TtNUS	NASA
2	1027	01.04.00.0007	9/11/2012	8	Transmittal of Final Sampling and Analysis Plan and Response to Comments for South End Disposal Area, Wallops Flight Facility	email	SEDA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
				01	05 Pre-Remedial Hazard Ranking System		umonto		
	[				So Fre-Remedial Hazard Ranking System				
			-		2.0 Removal Response				
	-	-	-	-	02.01 Removal Response Corresp	ondence	-	-	
1	0038	02.01.00.0001	2/15/1995	2	Radiation Survey 'Walk-over' of Salvage Yard at Wallops Flight Facility (West Side of Building N-222)	Letter	N-222	Tad M. Blanchard, Senior Health Physics Technician, National Health Services, Inc.	Head, Safety and Health Branch, Terry Potterton/NASA
1	0039	02.01.00.0002	6/30/1995	1	Comments on Proposed Project Approach for Radiological Survey, Scrapyard, Wallops Flight Facility	Letter	N-222	Stacie M. Driscoll/ EPA Region III	Ms. Teresa Spagnuolo/NASA
1	0040	02.01.00.0003	1/22/1996	5	Comments on NASA Goddard Space Flight Center Wallops Flight Facility, Scrapyard, Work Plan for Radiological Survey	Letter	N-222	Stacie M. Driscoll/ EPA Region III	Ms. Teresa Spagnuolo/NASA
1	0041	02.01.00.0004	3/15/1996	14	Response to Comments on the Work Plan for Radiological Survey	Letter	N-222	Teresa Spagnuolo/ NASA	Stacie Morekas- Driscoll/EPA, Region III
1	0042	02.01.00.0005	4/1/1996	1	Work Plan for Radiological Survey, Approval of Response to Comments	Letter	N-222	Stacie M. Driscoll/ EPA, Region III	Ms. Teresa Spagnuolo/NASA
1	0043	02.01.00.0006	3/19/2003	2	Notification and Certification Requirements of 40 CFR Part 761.61	Letter	N-222	Sue Fields, NASA RPM	Donald S. Welsh, EPA/ R.G. Brumley DEQVA/K. Bull, Accomack County

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0124	02.01.00.0007	6/17/2003	3	EPA Comments on the Draft Removal Action Completion Report for Site 005 and Site 012 dated May 2003	Letter	5/12	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0125	02.01.00.0008	7/2/2004	2	EPA Comments on the Final Removal Action Completion Report for the N-222 Scrapyard Area dated June 4, 2004	Letter	N-222	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0126	02.01.00.0009	10/15/2004	1	VADEQ Comments on the Final Removal Action Completion Report for the N-222 Scrapyard Area dated June 4, 2004	Letter	N-222	Paul Herman/VADEQ	Susan Fields/NASA
2	0620	02.01.00.0010	4/14/2009	1	Development of Cleanup Goals for Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	0621	02.01.00.0011	4/14/2009	1	Development of Cleanup Goals for Main Base Firing Range Complex, NASA Wallops Flight Facility	Letter	MBFRC	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0668	02.01.00.0012	5/19/2009	1	Technical Memorandum; Development of Removal Action Cleanup Goals, Site 4, Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	0669	02.01.00.0013	5/19/2009	1	Technical Memorandum; Development of Removal Action Cleanup Goals, Site 4, Island Debris Pile, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0670	02.01.00.0014	5/29/2009	1	MBFR - EE/CA submittal date change	e-mail	MBFRC	Theodore J. Meyer/NASA	Steven Hirsh/EPA/ Paul Herman/VDEQ
2	0671	02.01.00.0015	5/29/2009	1	MBFR - EE/CA submittal date change	e-mail	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0672	02.01.00.0016	5/29/2009	1	MBFR - EE/CA submittal date change	e-mail	MBFRC	Steven Hirsh/EPA	Theodore J. Meyer/NASA
2	0673	02.01.00.0017	6/12/2009	3	Technical Memorandum; Development of Removal Action Cleanup Goals, MBFR, Island Debris Pile, NASA Wallops Flight Facility	Letter	MBFRC	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0674	02.01.00.0018	6/26/2009	9	MBFR Teleconference Summary and Letter Sampling Plan	Letter	MBFRC	Steven Hirsh/EPA	Theodore J. Meyer/NASA
2	0675	02.01.00.0019	6/26/2009	7	MBFR Teleconference Summary and Letter Sampling Plan	Letter	MBFRC	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0676	02.01.00.0020	6/30/2009	1	MBFR - BTAG comments for Tech Memo for MBFR clean up goals	Letter	MBFRC	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0677	02.01.00.0021	7/21/2009	2	Draft Development of Removal Action Clean up Goals Site 4, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0678	02.01.00.0022	8/27/2009	1	Summary for Supplemental Soil Sampling at MBFR	Letter	MBFRC	Steven Hirsh/EPA	Theodore J. Meyer/NASA
2	0679	02.01.00.0023	8/27/2009	1	Summary for Supplemental Soil Sampling at MBFR	Letter	MBFRC	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0735	02.01.00.0024	10/30/2009	1	Draft EE/CA for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	0736	02.01.00.0025	10/30/2009	1	Draft EE/CA for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0737	02.01.00.0026	12/14/2009	2	Draft EE/CA for Site 4, Island Debris Pile, NASA WFF	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0738	02.01.00.0027	10/30/2009	1	Draft EE/CA for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0739	02.01.00.0028	12/23/2009	5	Draft EE/CA for Site 4, Island Debris Pile, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0740	02.01.00.0029	1/5/2010	1	Draft Action Memorandum for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0741	02.01.00.0030	1/5/2010	1	Draft Action Memorandum for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	0742	02.01.00.0031	1/5/2010	1	Draft Action Memorandum for Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0743	02.01.00.0032	2/4/2010	2	Response to Regulatory Comments on the Draft EE/CA for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0744	02.01.00.0033	2/4/2010	63	Response to Regulatory Comments on the Draft EE/CA for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0745	02.01.00.0034	2/4/2010	63	Response to Regulatory Comments on the Draft EE/CA for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	0746	02.01.00.0035	2/9/2010	1	Response to USEPA Comments dated December 23, 2009 for the Draft EE/CA for Site 4 NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0747	02.01.00.0036	2/10/2010	2	VADEQ Acceptance of Response to Comments for EE/CA for Site 4 NASA WFF	e-mail	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0787	02.01.00.0037	2/18/2010	1	Final Engineering Evaluation/Cost Analysis for Site 4, Island Debris Pile	letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0788	02.01.00.0038	2/18/2010	1	Final Engineering Evaluation/Cost Analysis for Site 4, Island Debris Pile	letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0789	02.01.00.0039	2/18/2010	1	Final Engineering Evaluation/Cost Analysis for Site 4, Island Debris Pile	letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0790	02.01.00.0040	3/2/2010	1	Final Engineering Evaluation and Cost Estimate (EE/CA) for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0791	02.01.00.0041	3/2/2010	2	Draft Action Memo, Non-Time Critical Removal Action for Soil for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0792	02.01.00.0042	3/10/2010	1	Final Engineering Evaluation and Cost Analysis, Site 4 - Island Debris Pile	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0793	02.01.00.0043	3/30/2010	2	Final Action Memorandum for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0794	02.01.00.0044	3/30/2010	2	Final Action Memorandum for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0795	02.01.00.0045	3/30/2010	2	Final Action Memorandum for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0796	02.01.00.0046	4/12/2010	1	Draft Removal Action Work Plan for Site 4, Island Debris Pile	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0797	02.01.00.0047	4/12/2010	1	Draft Removal Action Work Plan for Site 4, Island Debris Pile	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0798	02.01.00.0048	4/12/2010	1	Draft Removal Action Work Plan for Site 4, Island Debris Pile	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0799	02.01.00.0049	6/1/2010	2	Draft Removal Action Work Plan for Site 4, Island Debris Pile	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0800	02.01.00.0050	6/30/2010	1	Draft Site Removal Action Work Plan Non- Time-Critical Removal Action for Soil Site 4 - Island Debris Pile	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0801	02.01.00.0051	7/1/2010	1	EPA Comments - Site 4 Island Debris Pile RAWP	e-mail	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0802	02.01.00.0052	7/2/2010	1	Response to Comments on Draft Removal Action Work Plan for Site 4 - Island Debris Pile at NASA WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0803	02.01.00.0053	7/2/2010	1	Response to Comments on Draft Removal Action Work Plan for Site 4 - Island Debris Pile at NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0804	02.01.00.0054	7/2/2010	1	Response to Comments on Draft Removal Action Work Plan for Site 4 - Island Debris Pile at NASA WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0805	02.01.00.0055	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0806	02.01.00.0056	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0807	02.01.00.0057	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0808	02.01.00.0058	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0809	02.01.00.0059	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0810	02.01.00.0060	7/21/2010	1	Final Removal Action Work Plan for Site 4, Island Debris Pile, WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0811	02.01.00.0061	3/17/2011	2	Response to Comments and Final Removal Action Work Plan Addendum for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0812	02.01.00.0062	3/17/2011	5	Response to Comments and Final Removal Action Work Plan Addendum for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0813	02.01.00.0063	3/17/2011	2	Response to Comments and Final Removal Action Work Plan Addendum for Site 4 - Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0814	02.01.00.0064	3/23/2011	1	Final Removal Action Work Plan Addendum - Pre-construction Sampling, Site 4 - Island Debris Pile	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0963	02.01.00.0065	10/12/2011	1	Comments on Draft Construction Completion Report For NTCRA for Soil at Site 4, Island Debris Pile, NASA WFF	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0964	02.01.00.0066	10/19/2011	2	Comments on Draft Construction Completion Report For NTCRA for Soil at Site 4, Island Debris Pile, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0965	02.01.00.0067	11/2/2011	4	Response to Comments on Draft Construction Completion Report For NTCRA for Soil at Site 4, Island Debris Pile, NASA WFF	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Dawn Fulsher/EPA, Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0966	02.01.00.0068	11/16/2011	1	Response to Comments on Draft Construction Completion Report For NTCRA for Soil at Site 4, Island Debris Pile, NASA WFF	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0967	02.01.00.0069	12/13/2011	1	Response to Comments on Draft Construction Completion Report For NTCRA for Soil at Site 4, Island Debris Pile, NASA WFF	Letter	4	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1397	02.01.00.0070	3/10/2015	1	Draft AI20 Action Memo	e-mail	AI20	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1398	02.01.00.0071	3/13/2015	1	Draft Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1399	02.01.00.0072	3/13/2015	1	Draft Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Lisa Denmark/EPA
2	1400	02.01.00.0073	3/13/2015	1	Draft Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Steven Hirsh/EPA
2	1401	02.01.00.0074	3/26/2015	1	VADEQ Comments - Draft Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1402	02.01.00.0075	3/30/2015	1	EPA Comments - Draft Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	e-mail	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1403	02.01.00.0076	4/7/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1404	02.01.00.0077	4/7/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Steven Hirsh/EPA
2	1405	02.01.00.0078	4/7/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Lisa Denmark/EPA
2	1406	02.01.00.0079	4/9/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	e-mail	AI20	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1407	02.01.00.0080	4/9/2015	4	EPA RTCs - AI20 Action Memo	e-mail	AI20	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and	Date	No. of	Description of	Doc. Type	Site	Author/Author's	Recipient/Recipient's
		Document Tracking No.		pages	Document/Correspondence			Affiliation	Affiliation
2	1408	02.01.00.0081	4/9/2015	5	VDEQ RTCs - AI20 Action Memo	e-mail	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1409	02.01.00.0082	4/9/2015	4	VDEQ RTCs - AI20 Action Memo - VDEQ folo cmnts	e-mail	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1410	02.01.00.0083	4/10/2015	2	EPA Comments for Action Memo (AI20)	e-mail	AI20	Steven Hirsh/EPA	David Liu/NASA
2	1411	02.01.00.0084	4/23/2015	6	VDEQ RTCs - AI20 Action Memo - VDEQ folo cmnts	e-mail	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1412	02.01.00.0085	4/28/2015	2	AI-20 RAWP Comments (EPA Comments)	e-mail	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1413	02.01.00.0086	4/30/2015	2	Wetland Delineation Report for North Island Transformer Sites at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
2	1414	02.01.00.0087	4/30/2015	2	Wetland Delineation Report for North Island Transformer Sites at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Lisa Denmark/EPA
2	1415	02.01.00.0088	4/30/2015	2	Wetland Delineation Report for North Island Transformer Sites at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
2	1416	02.01.00.0089	4/30/2015	2	Wetland Delineation Report for North Island Transformer Sites at NASA GSFC WFF	Letter	NIT	David Liu/NASA	Peter Kube/USACE
2	1417	02.01.00.0090	5/19/2015	4	Draft Removal Action Work Plan - Time Critical Removal Action for Area of Interest 20 (Al20) Pole-Mounted Transformer	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1418	02.01.00.0091	6/15/2015	23	VDEQ RTC - AI20 RAWP; EPA RTCs - AI20 RAWP; revised Figures AI20 removal	e-mail	AI20	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1419	02.01.00.0092	6/18/2015	1	Draft - Wetland Delineation Report for North Island Transformer Sites at NASA GSFC WFF	Letter	AI20	Katie Matta/BTAG	David Liu/NASA
2	1420	02.01.00.0093	7/8/2015	1	Final Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1421	02.01.00.0094	7/8/2015	1	Final Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Lisa Denmark/EPA
2	1422	02.01.00.0095	7/8/2015	1	Final Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1423	02.01.00.0096	7/30/2015	1	AI-20 RAWP EPA&VDEQ Response to Comments	e-mail	AI20	Lisa Denmark/EPA	David Liu/NASA
2	1424	02.01.00.0097	8/10/2015	1	AI-20 Proposed lateral extent of excavation	e-mail	AI20	Paul Herman/VADEQ	David Liu/NASA
2	1425	02.01.00.0098	8/13/2015	1	RAWP Add AI-20 TCRA (Aug2015) .pdf	e-mail	AI20	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1426	02.01.00.0099	9/3/2015	1	Final Removal Action Work Plan for Time Critical Removal for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Paul Herman/VADEQ
2	1427	02.01.00.0100	9/3/2015	1	Final Removal Action Work Plan for Time Critical Removal for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Lisa Denmark/EPA
2	1428	02.01.00.0101	9/3/2015	1	Final Removal Action Work Plan for Time Critical Removal for Area of Interest 20 at NASA GSFC WFF	Letter	AI20	David Liu/NASA	Steven Hirsh/EPA
	1507	02.01.00.0102	5/24/2016	1	Final Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
	1508	02.01.00.0103	5/24/2016	1	Final Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA
	1509	02.01.00.0104	5/24/2016	1	Final Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1510	02.01.00.0105	4/15/2016	16	Response to Comments from EPA and VDEQ for Main Base Firing Range Complex	email	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1511	02.01.00.0106	5/2/2016	1	Final Action Memorandum for the Main Base Firing Range Complex	Letter	MBFRC	Paul Herman/VADEQ	David Liu/NASA
	1512	02.01.00.0107	4/7/2016	1	Final Action Memorandum Non-Time- Critical Removal Action for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
	1513	02.01.00.0108	4/7/2016	1	Final Action Memorandum Non-Time- Critical Removal Action for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Steven Hirsh/EPA
	1514	02.01.00.0109	4/7/2016	1	Final Action Memorandum Non-Time- Critical Removal Action for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Lorie Baker/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1515	02.01.00.0110	3/16/2016	8	Response to Comments from EPA and VDEQ for Main Base Firing Range Complex	email	AI20	David Liu/NASA	Lorie Baker/EPA
	1516	02.01.00.0111	2/19/2016	1	Draft Action Memorandum for Main Base Friing Range - Response to Comments	email	WFF	Lorie Baker/EPA	David Liu/NASA
	1517	02.01.00.0112	2/18/2016	1	Final Removal Action Work Plan for Time- Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1518	02.01.00.0113	2/18/2016	1	Final Removal Action Work Plan for Time Critical Removal for North Island Transformers	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1519	02.01.00.0114	2/12/2016	1	Final Soil Characterization Report for North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1520	02.01.00.0115	2/22/2016	1	Final Action Memorandum North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1521	02.01.00.0116	2/9/2016	1	North Island Transformer I Additional Information Memorandum	email	NIT	Lorie Baker/EPA	David Liu/NASA
	1522	02.01.00.0117	2/9/2016	1	Final Action Memorandum forTime Critical Removal Action for North Island Transformers	letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1523	02.01.00.0118	2/9/2016	1	Final Action Memorandum for Time Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1524	02.01.00.0119	1/25/2016	10	North Island Transformer I Response to Comments	email	NIT	David Liu/NASA	Paul Herman/VADEQ
	1525	02.01.00.0120	1/21/2016	1	Final Soil Characterization Report for North Island Transformers	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1526	02.01.00.0121	1/21/2016	1	Final Soil Characterizatino Report for North Island Transformers	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1527	02.01.00.0122	1/20/2016	10	North Island Transformers I Response to Comments	email	NIT	David Liu/NASA	Lorie Baker/EPA
	1528	02.01.00.0123	1/15/2016	4	Draft Action Memorandum Main Base Firing Range Complex - Response to Comments	email	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1529	02.01.00.0124	1/15/2016	1	Draft Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1530	02.01.00.0125	1/15/2016	1	Draft Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1531	02.01.00.0126	1/11/2016	10	Final Action Memorandum for Time Critical Removal Action for North Island Transformers - Response to Comments	email	NIT	David Liu/NASA	Lorie Baker/EPA
	1532	02.01.00.0127	1/4/2016	2	Draft Removal Action Work Plan for the North Island Transformers	Letter	NIT	Lorie Baker/EPA	David Liu/NASA
	1533	02.01.00.0128	1/4/2016	2	Draft Action Memorandum for a Non-Time- Citical Removal Action Main Base Firing Range Complex - Pistol and Rifle Range	Letter	MBFRC	Paul Herman/VADEQ	David Liu/NASA
	1534	02.01.00.0129	12/28/2015	2	Draft Action Memorandum Time-Critical Removal Action fo the North Island Transformers	Letter	NIT	Lorie Baker/EPA	David Liu/NASA
	1535	02.01.00.0130	12/21/2015	8	North Island Transformers 1 and 7 Soil Characterizaton - NASA Response to Comments	email	NIT	David Liu/NASA	Lorie Baker/EPA
	1536	02.01.00.0131	12/16/2015	2	Draft Action Memorandum for a Time- Critical Removal Action North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1537	02.01.00.0132	12/18/2015	2	Draft Removal Action Work Plan for a Time-Critical Removal Action North Island Transformers	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1538	02.01.00.0133	12/8/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1539	02.01.00.0134	12/8/2015	1	Draft Removal Action Work Plan for Time Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1540	02.01.00.0135	12/8/2015	1	Final Engineering Evaluation/Cost Analysis for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1541	02.01.00.0136	12/8/2015	1	Final Engineering Evaluation/Cost Analysis for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
	1542	02.01.00.0137	11/30/2015	2	Draft Soil Characterization Report North Island Transformers 1 and 7	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1543	02.01.00.0138	8/25/2015	1	Draft Engineering Evaluation/Cost Analysis for the Main Base Firing Range Complex	email	MBFRC	Steven Hirsh/EPA	David Liu/NASA
	1544	02.01.00.0139	11/27/2015	1	Draft Action Memorandum Non-Time- Critical Removal Action for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Lorie Baker/EPA
	1545	02.01.00.0140	11/27/2015	1	Draft Action Memorandum Non-Time- Critical Removal Action for the Main Base Firing Range Complex	Letter	MBFRC	David Liu/NASA	Paul Herman/VADEQ
	1546	02.01.00.0141	11/25/2015	1	Draft Action Memorandum for Time Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1547	02.01.00.0142	11/25/2015	1	Draft Action Memorandum for Time Critical Removal Action for North Island Transformers	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1548	02.01.00.0143	10/26/2015	1	Draft Soil Characterization Report North Island Transformers 1 and 17	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA
	1549	02.01.00.0144	10/26/2015	1	Draft Soil Characterization Report for North Island Transformers 1 and 17	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1550	02.01.00.0145	10/21/2015	1	Draft Soil Characterization Report North Island Transformers 1 and 17	email	NIT	David Liu/NASA	Paul Herman/VADEQ
	1585	02.01.00.0146	6/20/2016	1	Review of RTCs on the Draft AI-20 Construction Completion Report	email	WFF	Lorie Baker/EPA	David Liu/NASA
	1601	02.01.00.0147	6/14/2016	1	Final Work Plan for Non-Time-Critical Removal Action - Pitsol and Rifle Range	Letter	MBFRC	Paul Herman/VADEQ	David Liu/NASA
	1602	02.01.00.0148	6/28/2016	1	Pistol and Rifle RangeExcavation Plan	email	WFF	Steven Hirsh/EPA	David Liu/NASA
	1603	02.01.00.0149	6/27/2016	2	Pistol and Rifle RangeExcavation Plan	email	WFF	Paul Herman/VADEQ	David Liu/NASA
	1632	02.01.00.0150	10/11/2016	1	Final Construction Completion Report for Area of Interest - 20 at NASA Goddard Space Flight Center	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1633	02.01.00.0151	10/11/2016	1	Final Construction Completion Report for Area of Interest - 20 at NASA Goddard Space Flight Center	Letter	WFF	David Liu/NASA	Steve Hirsh/EPA
	1634	02.01.00.0152	10/11/2016	1	Final Construction Completion Report for Area of Interest - 20 at NASA Goddard Space Flight Center	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1635	02.01.00.0153	10/27/2016	2	Draft Construction Completion Report For Time Critical Removal Action for Soil NIT Sites	Letter	NIT	Lorie Baker/EPA	David Liu/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1636	02.01.00.0154	10/31/2016	10	Projects 11 and 17 Study Area Screening Evaluation Response to Comments	Email	WFF	David Liu/NASA	Lorie Baker/EPA/Paul Herman/DEQ/Steve Hirsh/EPA
	1637	02.01.00.0155	11/10/2016	6	Response to Comments from EPA and VDEQ for North Island Transformer Construction Completion Report	email	NIT	David Liu/NASA	Lorie Baker/EPA/Paul Herman/DEQ/Steve Hirsh/EPA
	1638	02.01.00.0156	11/10/2016	1	Draft Construction Completion Report for Time Critical Removal Action for the Main Base Firing RangeComplex	Letter	WFF	David Liu/NASA	Steve Hirsh/EPA
	1639	02.01.00.0157	11/10/2016	1	Draft Construction Completion Report for Time Critical Removal Action for the Main Base Firing RangeComplex	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1640	02.01.00.0158	11/10/2016	1	Draft Construction Completion Report for Time Critical Removal Action fo rthe Main Base Firing Range Complex	Letter	WFF	David Liu/NASA	Paul Herman/VDEQ
	1641	02.01.00.0159	12/9/2016	1	Final Construction Completion Report for the Time Critical Removal Action for Soil at North Island Transformers (NIT) 1, 7, 14, and 17	Letter	NIT	David Liu/NASA	Steve Hirsh/EPA
	1642	02.01.00.0160	12/9/2016	1	Final Construction Completion Report for the Time Critical Removal Action for Soil at North Island Transformers (NIT) 1, 7, 14, and 17	Letter	NIT	David Liu/NASA	Paul Herman/VDEQ
	1643	02.01.00.0161	12/9/2016	1	Final Construction Completion Report for the Time Critical Removal Action for Soil at North Island Transformers (NIT) 1, 7, 14, and 17	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1644	02.01.00.0162	12/28/2016	1	Final Construction Completion Report for the Time Critical Removal Action for Soil at North Island Transformers (NIT) 1, 7, 14, and 17	Letter	NIT	Paul Herman/VADEQ	David Liu/NASA
	1645	02.01.00.0163	1/12/2017	1	Final Construction Completion Report for the Time Critical Removal Action for Soil at North Island Transformers (NIT) 1, 7, 14, and 17	Letter	NIT	Lorie Baker/EPA	David Liu/NASA
	1671	02.01.00.0164	11/25/2016	1	NASA response to EPA comments on the North Island Transformers 1, 7, 14, and 17	Email	NIT	Lorie Baker/EPA	David Liu/NASA
	1672	02.01.00.0165	11/25/2016	1	Final Construction Completion Report for AI-20, Pole-Mounted Transformer	Email	WFF	Lorie Baker/EPA	David Liu/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1673	02.01.00.0166	11/25/2016	1	Final Soil Characterization Report for the North Island Transformers 1 and 17	Letter	NIT	Lorie Baker/EPA	David Liu/NASA
	1674	02.01.00.0167	11/25/2016	1	Final Removal Action Work Plan for the Non-Time-Critical Removal Action at the Main Base Firing Range Complex	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1675	02.01.00.0168	12/25/2016	1	Final Engineering Evaluation and Cost Analysis for the Non-Time-Critical Removal Action for the Main Base Firing Range Complex	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1676	02.01.00.0169	11/25/2016	1	Final Action Memo for the Non-Time- Critical Removal Action fo rthe Main Base Firing Range Complex	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1677	02.01.00.0170	11/25/2016	1	Final Removal Action Work Plan for the Non-Time-Critical Removal Action for Soils for the North Island Transformers 1 7, 14 17	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1678	02.01.00.0171	11/25/2016	1	Final Action Memo for the Time-Critical Removal Action for Soils for the North Island Transformers 1, 7, 14, and 17	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1679	02.01.00.0172	11/25/2016	1	Study Area Screening Evaluation Response to Comments	email	WFF	Lorie Baker/EPA	David Liu/NASA
	1		-	T	02.02 Removal Response Rep	ports			
1	0044	02.02.00.0001	6/9/1995	11	Proposed Approach for Radiological Survey for Scrapyard located at Wallops Flight Facility (WFF)	Letter	N-222	Teresa Spagnuolo/NASA	Stacie Morekas- Driscoll/EPA, Region III
1	0045	02.02.00.0002	10/10/1997	72	Final Scrapyard Area Radiological Survey Report	Report	N-222	Metcalf & Eddy	NASA
1	0046	02.02.00.0003	10/1/2002	59	Final Sampling and Analysis Plan and Radiological Field Survey for the N-222 Scrapyard and Area	Report	N-222	Weiss Associates	NASA
1	0047	02.02.00.0004	1/1/2003	73	Final Work Plan For The Removal Action At Site 005 and Site 012 Wallops Flight Facility	Report	5/12	Foster Wheeler Environmental Corporation	NASA
1	0048	02.02.00.0005	1/31/2003	162	Soil Sampling and Radiological Field Survey Data Gaps Report	Report	N-222	Weiss Associates	NASA
1	0049	02.02.00.0006	3/14/2003	101	Removal Action Work Plan for The N-222 Scrapyard Area	Report	N-222	Weiss Associates	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0072	02.02.00.0007	6/1/2003	38	Final Work Plan Addendum for the OE Removal Action at the N-222 Scrapyard Area WFF 2/03	Report	N-222	NASA	NASA
1	0073	02.02.00.0008	6/1/2003	59	Final Site Health and Safety Plan Addendum for the OE Removal Action at the N-222 Scrapyard Area, June 2003	Report	N-222	NASA	NASA
1	0127	02.02.00.0009	7/1/2003	623	Final Removal Action Completion Report for Site 005 and Site 012	Report	5/12	Foster Wheeler	NASA
1	0128	02.02.00.0010	10/1/2003	25	Final Ordnance Investigation Completion Report for the N-222 Scrapyard Area	Report	N-222	Foster Wheeler	NASA
1	0129	02.02.00.0011	4/4/2003	154	Work Plan For The Removal Action At N- 222 Scrapyard Area	Report	N-222	Foster Wheeler	NASA
1	0130	02.02.00.0012	6/1/2004	633	Final Removal Action Completion Report for the N-222 Scrapyard Area	Report	N-222	Foster Wheeler	NASA
2	0680	02.02.00.0013	8/27/2009	31	Summary for Supplemental Soil Sampling at MBFR	Report	MBFRC	Tetra Tech NUS, Inc.	NASA, EPA, VADEQ
2	0779	02.02.00.0014	2/12/2010	108	Final Engineering Evaluation/Cost Analysis (EE/CA) Non-Time Critical Removal Action for Soil Site 4 - Island Debris Pile	Report	4	Tetra Tech NUS, Inc.	NASA, EPA, VADEQ
2	0815	02.02.00.0015	7/1/2010	114	Final Removal Action Work Plan - Non- time-critical Action for Soil, Site 4 - Island Debris Pile	Report	4	Tetra Tech NUS, Inc.	NASA, EPA, VADEQ
2	1396	02.02.00.0016	5/6/2015		Final Biological Evaluation for North Island Transformer Site Investigation and Remediation	Report	NIT	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1429	02.02.00.0017	6/15/2015		Federal Consistency Determination - Site Investigation and Remediation North Island Transformer Sites, NASA WFF	Report	NIT	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1430	02.02.00.0018	6/29/2015	36	Final Action Memo for Time Critical Removal Action for Area of Interest 20 at NASA GSFC WFF	Report	AI20	NASA	EPA, VADEQ
2	1431	02.02.00.0019	6/1/2015	136	Final Wetland Delineation North Wallops Island PCB Transformer Sites	Report	NIT	Tetra Tech, Inc.	NASA
2	1432	02.02.00.0020	7/1/2015	199	Final Removal Action Work Plan for Time Critical Removal for Area of Interest 20 at NASA GSFC WFF	Report	AI20	Tetra Tech, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1433	02.02.00.0021	7/28/2015	40	Revised Final Biological Evaluation North Island Transformer Sites Investigation and Remediation	Report	NIT	Tetra Tech, Inc.	NASA
	1551	02.02.00.0022	1/1/2016	1396	Soil Characterization Report for North Island Transformers 1 and 17	Report	NIT	Tetra Tech, Inc.	NASA
	1552	02.02.00.0023	8/25/2015	10	Replacement Pages for Final Removal Action Work Plan for Time Critical Removal Action at Area of Interest 20		NIT	David Liu/NASA	Steven Hirsh/EPA
	1553	02.02.00.0024	3/16/2016	12	Proposed Excavation Limits North Island Transformers 1 and 7	email	NIT	David Liu/NASA	Lorie Baker/EPA
	1554	02.02.00.0025	1/28/2016	16	Technical Memorandum for North Island Transformer 1 - Additional Information	email	NIT	David Liu/NASA	Lorie Baker/EPA
	1604	02.02.00.0026	6/27/2016	12	Pistol and Rifle RangeExcavation Plan	email	WFF	David Liu/NASA	Lorie Baker/EPA, Steve Hirsh/EPA, Paul Herman/VADEQ
	1646	02.02.00.0027	12/1/2016	2708	Final Construction Completion Report Time-Critical Removal Action for Soil North Island Transformers 1, 7, 14, 17	Report	NIT	Tetra Tech, Inc.	NASA

		EPA AR							
DVD	ID No.	Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.			02.03 Removal Response CERCLA Remo	oval Site Rec	ord		
1	0050	02.03.00.0001	2/2003	7	Action Memorandum for the NASA Goddard Space Flight Center's Non-time- critical Removal Action at the Paint Stain (Site 5) and Former Wind Tunnel (Site 12) Wallops Island, VA	Action Memo	5/12	William B. Bott/NASA	
2	0816	02.03.00.0002	4/1/2010	134	Final Action Memorandum, Non-Time- Critical Removal Action for Soil, NASA WFF	Action Memo	4	Tetra Tech NUS, Inc.	NASA, EPA, VADEQ
	1582	02.03.00.0003	1/1/2016	38	Final Action Memorandum, Time-Critical Removal Action for Soil North Island Transformers	Action Memo	NIT	Tetra Tech, Inc.	NASA
	1583	02.03.00.0004	4/1/2016	46	Final Action Memorandum, Non-Time- Critical Removal Action for Soil, Main Base Firing Range	Action Memo	MBFRC	Tetra Tech, Inc.	NASA
	1605	02.03.00.0005	7/1/2016	10	Consensus Document NFA	CD	NIT	Tetra Tech, Inc.	NASA
	1606	02.03.00.0006	7/1/2016	683	Construction Completion Report Time- Critical Removal Action for Soil	CD	AI20	Tetra Tech, Inc.	NASA
					3.0 Remedial Investigation (				
	-				03.01 Remedial Investigation Corres	spondence			
1	0051	03.01.00.0001	10/6/1992	14	Review of the draft Work Plan, Fire Training Area, Remedial Investigation/Feasibility Study for Wallops Flight Facility and the draft Field Operations Plan, Fire Training Area, Remedial Investigation/Feasibility Study for Wallops Flight Facility	Letter	FFTA	Stacie Morekas/USEPA	Mr. Terry M. Potterton/NASA
1	0052	03.01.00.0002	2/5/1997	13	Ecological Risk Assessment, Revisions to Work Plan for Sites 5, 12, 14, and 15	Letter	5/12 14/15	Mr. William H. Burton/Versar, Inc.	Coastal Resource Coordinator/National Oceanic and Atmospheric Administration
1	0053	03.01.00.0003	1/1/2002	2	VADEQ Comments on the December 2001 RI/FS for Sites 5 and 12, undated	Letter	5/12	VADEQ	NASA
1	0054	03.01.00.0004	2/25/2002	6	VADEQ Comments on the March 2001 RI/FS for Site 16	Letter	WOD	VADEQ	NASA
1	0131	03.01.00.0005	11/25/2003	2	VADEQ Comments on the Draft Supplemental Remedial Investigation for the Waste Oil Dump submitted October 2003	Letter	WOD	VADEQ	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0132	03.01.00.0006	12/2/2003	1	VADEQ Comments on the Draft Supplemental Remedial Investigation for the Former Fire Training Area	Memo	FFTA	VADEQ	NASA
1	0133	03.01.00.0007	1/16/2004	2	EPA Comments on the Draft Supplemental Remedial Investigation for the Waste Oil Dump submitted October 2003	Letter	WOD	EPA	NASA
1	0134	03.01.00.0008	1/22/2004	2	EPA Comments on the Draft Supplemental Remedial Investigation for the Former Fire Training Area	Letter	FFTA	EPA	NASA
1	0135	03.01.00.0009	2/24/2004	11	NASA Response to VADEQ December 2, 2003 Comments and EPA January 22, 2004 Comments on the October 2003 Draft Supplemental Remedial Investigation for the Former Fire Training Area Telephone Conversation Reporting Form of USFWS Comments on the WOD and FFTA RIs	Memo	FFTA/ WOD	NASA	Project Team
1	0136	03.01.00.0010	2/24/2004	12	NASA Response to VADEQ November 25, 2003 Comments and EPA January 16, 2004 Comments on the Draft Supplemental Remedial Investigation for the Waste Oil Dump submitted October 2003	Letter	WOD	NASA	Project Team
1	0137	03.01.00.0011	3/22/2004	2	EPA Response to Draft Supplemental Remedial Investigation Report for the Former Fire Training Area and Waste Oil Dump	Letter	FFTA/ WOD	NASA	TtNUS
1	0138	03.01.00.0012	3/29/2004	1	EPA Review of Response to Comments on the October 2003 Supplemental Remedial Investigation for the Former Fire Training Area	Letter	FFTA	EPA	NASA
1	0139	03.01.00.0013	4/8/2004	1	VADEQ Review of Response to Comments on the October 2003 Supplemental Remedial Investigation for the Former Fire Training Area	Letter	FFTA	NASA	
1	0140	03.01.00.0014	6/8/2004	2	Replacement of Chapter 7 in the Final Supplemental Remedial Investigation for the Former Fire Training Area submitted May 20, 2004	Letter	FFTA	TtNUS	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0141	03.01.00.0015	6/14/2004	1	VADEQ Comments on the Draft-Final Supplemental Remedial Investigation for the Former Fire Training Area dated June 2004 and the Response to Comments dated February 2004	Letter	FFTA	VADEQ	NASA
1	0142	03.01.00.0016	7/16/2004	2	Email - P. Herman (VADEQ) to C. Turner (NASA) approval of the Draft-Final Supplemental Remedial Investigation for the Former Fire Training Area dated June 2004	Letter	FFTA	VADEQ	NASA
1	0143	03.01.00.0017	9/14/2004	1	VADEQ Comments on the Draft Groundwater Characterization Work Plan for N-222 Scrapyard Area dated July 2004.	Letter	N-222	Paul Herman/VADEQ	Susan Fields/NASA
1	0144	03.01.00.0018	9/14/2004	1	EPA Comments on the Draft Groundwater Characterization Work Plan for N-222 Scrapyard Area dated July 2004.	Letter	N-222	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0145	03.01.00.0019	10/5/2004	2	email: Wallops WOD Site, VADEQ Comments on the WOD Supplemental RI	Letter	WOD	VADEQ	Project Team
1	0146	03.01.00.0020	10/7/2004	3	NASA Response to EPA and VADEQ Comments on the Draft Groundwater Characterization Work Plan for N-222 Scrapyard Area dated July 2004.	Letter	N-222	Sue Fields/NASA	Project Team
1	0147	03.01.00.0021	10/8/2004	2	email: Wallops WOD Site, Depth to Groundwater	Letter	WOD	Garth Glenn/TtNUS	Project Team
1	0148	03.01.00.0022	10/8/2004	3	email: VADEQ Response to NASA Response to Comments on the Draft Groundwater Characterization Work Plan for N-222 Scrapyard Area dated July 2004.	Letter	N-222	Paul Herman/VADEQ	Project Team
1	0149	03.01.00.0023	10/7/2004	1	email: EPA Response to NASA Response to Comments on the Draft Groundwater Characterization Work Plan for N-222 Scrapyard Area dated July 2004.	Letter	N-222	Michelle Price-Fay/ EPA	Project Team
1	0205	03.01.00.0024	12/20/2004	3	Ltr - Final Supplemental Remedial Investigation Report Waste Oil Dump (WOD)	Letter	WOD	TtNUS	Susan Fields/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0232	03.01.00.0025	2/9/2005	1	EPA Acceptance of the Final Groundwater Characterization Work Plan for the N-222, Scrapyard Area	Letter	N-222	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0233	03.01.00.0026	3/4/2005	1	VADEQ Acceptance of the Final Supplemental Remedial Investigation for the Waste Oil Dump	Letter	WOD	Paul Herman/VADEQ	Susan Fields/NASA
1	0234	03.01.00.0027	3/4/2005	1	VADEQ Acceptance of the Final Groundwater Characterization Work Plan for the N-222, Scrapyard Area	Letter	N-222	Paul Herman/VADEQ	Susan Fields/NASA
1	0235	03.01.00.0028	4/26/2005	4	VADEQ Comments on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Letter	5/12	Paul Herman/VADEQ	Susan Fields/NASA
1	0236	03.01.00.0029	6/9/2005	1	EPA Comments on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Letter	5/12	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0237	03.01.00.0030	6/16/2005	1	EPA Acceptance of the Supplemental Remedial Investigation Report for the Waste Oil Dump	Letter	WOD	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0238	03.01.00.0031	7/7/2005	5	NASA Response to Comments on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Letter	5/12	Susan Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0239	03.01.00.0032	7/8/2005	6	email - NASA Response to Comments on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Memo	5/12	Carolyn Turner/NASA	Project Team
1	0240	03.01.00.0033	7/12/2005	1	email - EPA Response to NASA RTC on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Memo	5/12	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0241	03.01.00.0034	7/13/2005	1	email - VADEQ Response to NASA RTC on the Draft Data Gap Investigation Work Plan for Sites 005 and 012	Memo	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0242	03.01.00.0035	9/2/2005	1	email - VADEQ Acceptance of the Final Polychlorinated Biphenyls Data Gap Investigation Work Plan for Sites 005 and 012	Memo	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0243	03.01.00.0036	9/12/2005	2	Draft Groundwater Characterization Report N-222 Scrapyard Area	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0244	03.01.00.0037	10/3/2005	1	EPA Comments on the Draft Groundwater Characterization Report N-222 Scrapyard Area	Letter	N-222	Michelle Price- Fay/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0245	03.01.00.0038	10/5/2005	1	EPA Acceptance of the Final Polychlorinated Biphenyls Data Gap Investigation Work Plan for Sites 005 and 012	Letter	5/12	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0246	03.01.00.0039	10/26/2005	1	VADEQ Comments on the Draft Groundwater Characterization Report N- 222 Scrapyard Area	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0247	03.01.00.0040	11/3/2005	5	NASA Response to Comments on the Draft Groundwater Characterization Report N-222 Scrapyard Area	Letter	N-222	Carolyn Turner/NASA	Project Team
1	0248	03.01.00.0041	11/8/2005	1	EPA Response to NASA RTCs on the Draft Groundwater Characterization Report N-222 Scrapyard Area	Memo	N-222	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0249	03.01.00.0042	11/14/2005	2	NASA Response to VADEQ Response to NASA RTCs on the Draft Groundwater Characterization Report N-222 Scrapyard Area	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0304	03.01.00.0043	1/9/2006	1	EPA Acceptance of the Final Groundwater Characterization Report for the N-222, Scrapyard Area	Letter	N-222	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0305	03.01.00.0044	1/12/2006	1	VADEQ Acceptance of the Final Groundwater Characterization Report for the N-222, Scrapyard Area	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0348	03.01.00.0045	7/27/2006	1	EPA response to Summary Site Status Report Scrapyard Site (Building N-222)	Letter	N-222	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0349	03.01.00.0046	8/15/2006	2	Final Summary Site Status Report for the Scrapyard Site (Building N-222)	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0350	03.01.00.0047	8/15/2006	2	Final Summary Site Status Report for the Scrapyard Site (Building N-222)	Letter	N-222	Carolyn Turner/NASA	Michelle Price-Fay/EPA; Jerry Hoover/EPA
1	0351	03.01.00.0048	8/29/2006	3	VDEQ comments on the Draft Remedial Investigation Report for sites 005 and 012.	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0352	03.01.00.0049	9/5/2006	1	VDEQ acceptance of the Final Summary Site Status Report for the N-222 Scrapyard Area	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0353	03.01.00.0050	10/2/2006	1	EPA acceptance of the Final Summary Site Status Report for the N-222 Scrapyard Area	Letter	N-222	Jerry Hoover/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0354	03.01.00.0051	10/10/2006	3	VDEQ addendum to comments on the Draft Remedial Investigation Report for sites 005 and 012.	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0355	03.01.00.0052	12/12/2006	1	email: NASA request for extension to the 45 day response to comment time period for Draft Remedial Investigation Report for Sites 005 and 012	Memo	5/12	Carolyn Turner/NASA	Jerry Hoover/EPA; Paul Herman/VADEQ
1	0356	03.01.00.0053	12/14/2006	2	email: EPA acceptance of NASA extension request for Draft Remedial Investigation Report for Sites 005 and 012	Memo	5/12	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0437	03.01.00.0054	6/1/2004	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft-Final Supplemental Remedial Investigation Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Susan Fields/NASA
1	0438	03.01.00.0055	1/9/2006	1	Re-Submittal of CD version of the Final Groundwater Characterization Report N- 222 Scrapyard, NASA, Goddard Space Flight Center's Wallops Flight Facility (WFF) Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0439	03.01.00.0056	12/14/2006	2	email: NASA WFF Sites5/12 Draft Remedial Investigation Report RTCs Deliverable Date Request (to January 12,2007)	Memo	5/12	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0440	03.01.00.0057	1/12/2007	1	Response to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0441	03.01.00.0058	1/12/2007	1	Response to Regulatory Comments on the Remedial Investigation report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0442	03.01.00.0059	2/22/2007	1	email: NASA Wallops Flight Facility - RTCs for Sites 005 and 012 Remedial Investigation Report	Memo	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0443	03.01.00.0060	7/25/2007	2	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments - Draft Remedial Investigation Report Sites 005 and 012	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0444	03.01.00.0061	8/29/2007	2	email: NASA WFF Sites 5/12 Response to Regulatory Comments-Extension request for NASA submittal to September 28	Memo	5/12	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0445	03.01.00.0062	8/29/2007	1	email: NASA WFF Sites 5/12 Response to Regulatory Comments-Extension request for NASA submittal to September 28	Memo	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA Paul Herman/VADEQ
1	0446	03.01.00.0063	9/28/2007	6	Response to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0447	03.01.00.0064	9/28/2007	5	Response to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0448	03.01.00.0065	10/11/2007	31	Summary Table with Responses to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0449	03.01.00.0066	10/11/2007	31	Summary Table with Responses to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0450	03.01.00.0067	1/2/2008	31	Response to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0451	03.01.00.0068	1/2/2008	30	Response to Regulatory Comments on the Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0452	03.01.00.0069	1/8/2008	1	email: RTC Sites 5 and 12	Memo	5/12	Carolyn Turner/NASA	Dawn Fulsher/EPA
2	0453	03.01.00.0070	1/22/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments - Draft Remedial Investigation Report Sites 005 and 012	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0454	03.01.00.0071	2/11/2008	2	email: NASA WFF Weekly Field Activities Report for Sites 5/12 MEC Clearance	Memo	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA Paul Herman/VADEQ
2	0455	03.01.00.0072	2/20/2008	1	Final Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0456	03.01.00.0073	2/20/2008	1	Final Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0457	03.01.00.0074	3/24/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Remedial Investigation Report Sites 005 and 012	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0458	03.01.00.0075	4/23/2008	1	Draft Remedial Investigation Response Report for Sites 5 & 12	Letter	5/12	Dawn Fulsher/EPA	Carolyn Turner/NASA
2	0459	03.01.00.0076	4/25/2008	1	Response to Regulatory Comments on the Final Remedial Investigation Report for Sites 5 and 12 at NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0566	03.01.00.0077	7/15/2008	1	Revisions for the Final sites 5 and 12 Remedial Investigation Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0567	03.01.00.0078	7/15/2008	1	Revisions for the Final sites 5 and 12 Remedial Investigation Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
03.02	2 Remed	ial Investigation	Sampling ar	nd Analy	sis Data - validated data and chain of cus	stody forms a	are includ		ting their location and
1	0055	03.02.00.0001	9/16/1993	586	Data Validation Narratives - Volume I	Report	WFF	Versar, Inc./Roy F. Weston, Inc.	NASA
1	0056	03.02.00.0002	5/14/1997	551	Data Validation Narratives - Volume II	Report	WFF	Versar, Inc.(Metcalf & Eddy/Roy F. Weston, Inc.)	NASA
	1				03.03 Remedial Investigation Site Man	agement Pla	n		
	<u> </u>		03.04 R	emedial	Investigation Work Plans (including FSA	P and QAPP	). Progres	s Reports	
1	0057	03.04.00.0001	3/29/1993	225	Fire Training Area RI/Feasibility Final Work Plan	WP	FFTA	Metcalf & Eddy, Inc.	NASA
1	0058	03.04.00.0002	10/1993	609	Fire Training Area RI/Feasibility Final Field Operations Plan	WP	FFTA	Metcalf & Eddy, Inc.	NASA
1	0059	03.04.00.0003	1/16/1995	373	Limited RI/Feasibility Study Final Work Plan Scrapyard	WP	N-222	Metcalf & Eddy, Inc.	NASA
1	0060	03.04.00.0004	5/2/1997	84	NASA Wallops island RI/FS Work Plan Sites 5, 12, 14, and 15	WP	5/12 14/15	Versar, Inc.	NASA
1	0061	03.04.00.0005	1/2003	800	Work Plan for Supplemental RI Activities at the Former Fire Fighting Training Area and Waste Oil Dump	WP	FFTA WOD	Tetra Tech NUS, Inc.	NASA
1	0094	03.04.00.0006	8/1/2003	123	Final Work Plan for the Supplemental RI at WFF Sites 005 and 012	WP	WFF	Foster Wheeler	NASA
1	0192	03.04.00.0007	11/19/2004	137	Final Work Plan - Groundwater Characterization at N-222 Scrapyard Area	Report	N-222	Weiss Associates	NASA
1	0250	03.04.00.0008	8/11/2005	93	Final Polychlorinated Biphenyls Data Gap Investigation Work Plan for Sites 005 and 012	Report	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
				00.075				1-	
				03.05 R	emedial Investigation Interagency or Fed	eral Facility	Agreemen	its	

		Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
				-	03.06 Remedial Investigation ARARs	- if applicable	Э		
					03.07 Remedial Investigation (RI	) Report			
1	0062	03.07.00.0001	8/28/1995	203	Limited RI Report for the Scrapyard Area	Report	N-222	Metcalf & Eddy	NASA
1	0063	03.07.00.0002	2/28/1996	370	Former Fire Training Area RI Final Report	Report	FFTA	Metcalf & Eddy	NASA
1	0064	03.07.00.0003	6/14/1999	757	RI/Feasibility Study Sites 14 and 15	Report	14/15	Versar, Inc.	NASA
1	0065	03.07.00.0004	12/6/2001	484	Draft RI/Feasibility Study Sites 5 and 12, Volume I	Report	5/12	Versar, Inc.	NASA
1	0066	03.07.00.0005	12/6/2001	445	Draft RI/Feasibility Study Sites 5 and 12, Volume II	Report	5/12	Versar, Inc.	NASA
1	0067	03.07.00.0006	3/13/2001	477	RI/Feasibility Study Site 16 Waste Oil Dump	Report	WOD	Versar, Inc.	NASA
1	0068	03.07.00.0007	10/6/2003	51	Final Site Screening Document M-15 Photographic Tank (Photo Tank) Site	Report	M15	Tetra Tech NUS, Inc.	NASA
1	0150	03.07.00.0008	1/1/2003	53	Final Wetlands Delineation Report for Site 005 and 012	Report	5/12	Foster Wheeler	NASA
1	0151	03.07.00.0009	5/17/2004	1	Final Supplemental Remedial Investigation Report	Letter	FFTA	NASA	EPA/VADEQ
1	0152	03.07.00.0010	7/21/2004	6297	Revised Final Supplemental Remedial Investigation of the Former Fire Training Area	Report	FFTA	TtNUS	NASA
1	0204	03.07.00.0011	12/29/2004	6243	Final Supplemental Remedial Investigation Report for Waste Oil Dump	Report	WOD	Sue Fields/NASA	Michelle Price-Fay/EPA and Paul Herman/VADEQ
1	0294	03.07.00.0012	12/12/2005	329	Final Groundwater Characterization Report N-222 Scrapyard	Report	N-222	Carolyn Turner/NASA	Michelle Price-Fay/EPA and Paul Herman/VADEQ
2	0460	03.07.00.0013	2/15/2008	3372	Sites 005 and 012 Remedial Investigation Report Revision 0, NASA Goddard Space Flight Center Wallops Flight Facility	Report	5/12	TtNUS	NASA
2	0568	03.07.00.0014	6/1/2008	3311	Sites 005 and 012 Remedial Investigation Report Revision 1, for Sites 005 and 012 National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility	Report	5/12	TtNUS	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
				03.08 F	Remedial Investigation Health Assessmer	nt - produced	by ATSD	र	
				03.	09 Remedial Investigation Endangerment	t/Risk Asses	sments		
1	0069	03.09.00.0001	12/8/2000	194	Risk Assessment Update Former Fire Fighting Training Area	Report	FFTA	Versar, Inc.	NASA
1	0357	03.09.00.0002	8/2006	70	Summary Site Status Report Scrapyard Site (Building N-222)	Report	N-222	TtNUS	NASA

		EPA AR											
DVD	ID No.	Category and	Date	No. of	Description of	Doc. Type	Site	Author/Author's	<b>Recipient/Recipient's</b>				
		Document	2010	pages	Document/Correspondence			Affiliation	Affiliation				
		Tracking No.			4.0 Feasibility Study (FS)								
	04.01 Feasibility Study (FS) Correspondence												
				1	Initial Development and Screening of								
1	0153	04.01.00.0001	3/1/2004	50	Alternatives for the Former Fire Training Area Site and Waste Oil Dump	Report	FFTA/ WOD	TtNUS	NASA				
					VADEQ Draft Comments on the Initial								
1	0154	04.01.00.0002	3/15/2004	1	Development and Screening of	Memo	FFTA	VADEQ	NASA				
· ·	0104	04.01.00.0002	0/10/2004	· ·	Alternatives for the Former Fire Training	Wento		VADEQ	NAOA				
					Area								
					VADEQ Comments on the Initial								
1	0155	04.01.00.0003	3/15/2004	2	Development and Screening of	Report	WOD	VADEQ	NASA				
					Alternatives for the Waste Oil Dump Site								
					EPA Response to NASA Response to								
1	0156	04.01.00.0004	3/29/2004	1	Comments on the Initial Development and	Report	WOD	EPA	NASA				
					Screening of Alternatives for the Waste Oil Dump Site								
					•								
1	0157	04 01 00 0005	4/20/2004	1	EPA Draft Comments on the Initial	Momo	FFTA	EPA	NASA				
	0157	04.01.00.0005	4/28/2004		Development and Screening of Alternative for the Former Fire Training Area	Memo	FFIA	EPA	INASA				
					EPA Comments on the Initial Development								
1	0158	04.01.00.0006	4/28/2004	1	and Screening of Alternatives for the	Report	WOD	EPA	NASA				
					Waste Oil Dump Site								
					NASA Preliminary Remediation Goals for				Paul Herman/VADEQ;				
1	0159	04.01.00.0007	9/20/2004	2	Former Fire Training Area Site	Letter	FFTA	NASA	Michelle Price-Fay/ EPA				
					NASA Preliminary Remediation Goals for				,				
					Waste Oil Dump Site; approach to resolve				Paul Herman/VADEQ;				
1	0160	04.01.00.0008	9/20/2004	5	comments on the development of PRGs	Letter	WOD	NASA	Michelle Price-Fay/EPA				
					for the WOD Site.								
					email: NASA WFF Waste Oil Dump, letter								
1	0161	04.01.00.0009	9/28/2004	3	to propose approach to be taken to resolve	Letter	WOD	Sue Fields/NASA	Project Team				
					comments on the development of PRGs for the WOD Site								
					email: NASA WFF Waste Oil Dump,								
1	0162	04.01.00.0010	9/28/2004	5	VADEQ comments concerning the	Letter	WOD	VADEQ	Project Team				
					proposed sampling plan and PRGs.								

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0163	04.01.00.0011	10/8/2004	7	email: Wallops WOD Site, VADEQ comments on screening alternatives	Letter	WOD	VADEQ	Project Team
1	0193	04.01.00.0012	11/23/2004	1	email: VADEQ Response to NASA Letter dated September 20, 2004 on PRGs for FFTA	Letter	FFTA	Paul Herman/VADEQ	Project Team
1	0251	04.01.00.0013	3/1/2005	1	Draft Feasibility Study Report for the Former Fire Training Area	Letter	FFTA	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0252	04.01.00.0014	4/26/2005	1	Draft Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0253	04.01.00.0015	5/31/2005	2	VADEQ Comments on the Draft Feasibility Study Report for the Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Sue Fields/NASA
1	0254	04.01.00.0016	6/6/2005	2	EPA Comments on the Draft Feasibility Study Report for the Former Fire Training Area	Letter	FFTA	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0255	04.01.00.0017	6/16/2005	2	EPA Comments on the Draft Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Michelle Price- Fay/EPA	Sue Fields/NASA
1	0256	04.01.00.0018	6/30/2005	12	VADEQ Comments on the Draft Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0257	04.01.00.0019	7/20/2005	12	NASA Response to Comments on the Draft Feasibility Study Report for the Former Fire Training Area	Letter	FFTA	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0258	04.01.00.0020	7/22/2005	1	email - NASA requesting clarification on EPA Comments for the Draft Feasibility Study for the Waste Oil Dump	Memo	WOD	Carolyn Turner/NASA	Michelle Price-Fay/EPA
1	0259	04.01.00.0021	8/2/2005	11	email - VADEQ Comments to NASA RTC on the Draft Feasibility Study Report for the Former Fire Training Area	Memo	FFTA	Paul Herman/VADEQ	Project Team
1	0260	04.01.00.0022	8/3/2005	1	email - EPA Comments to NASA RTC on the Draft Feasibility Study Report for the Former Fire Training Area	Memo	FFTA	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0261	04.01.00.0023	8/11/2005	11	NASA Response to Comments on the Draft Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0262	04.01.00.0024	8/12/2005	1	email - EPA Response to NASA RTC on the Draft Feasibility Study Report for the Waste Oil Dump	Memo	WOD	Michelle Price- Fay/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0263	04.01.00.0025	9/2/2005	1	email - VADEQ Acceptance of the Final Feasibility Study Report for the Former Fire Training Area	Memo	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0264	04.01.00.0026	9/2/2005	1	email - VADEQ Response to NASA RTC on the Draft Feasibility Study for the Waste Oil Dump	Memo	WOD	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0265	04.01.00.0027	9/21/2005	1	EPA Acceptance of the Final Feasibility Study Report for the Former Fire Training Area	Letter	FFTA	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0266	04.01.00.0028	10/18/2005	1	VADEQ Acceptance of the Final Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0267	04.01.00.0029	11/28/2005	2	Draft Proposed Remedial Action Plan for the Former Fire Training Area	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0295	04.01.00.0030	12/7/2005	1	email - Correspondence on the Submittal of the Waste Oil Dump Proposed Remedial Action Plan	Memo	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0296	04.01.00.0031	12/19/2005	1	VADEQ comments on the draft Proposed Remedial Action Plan for the Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0306	04.01.00.0032	1/9/2006	1	EPA Acceptance of the Final Feasibility Study Report for the Waste Oil Dump	Letter	WOD	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0307	04.01.00.0033	2/2/2006	2	EPA comments on the draft Proposed Remedial Action Plan for the Former Fire Training Area	Letter	FFTA	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0308	04.01.00.0034	3/14/2006	9	NASA Response to Comments on the draft Proposed Remedial Action Plan for the Former Fire Training Area	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
1	0309	04.01.00.0035	3/20/2006	1	VADEQ acceptance of NASA responses on draft Proposed Remedial Action Plan for Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0310	04.01.00.0036	3/29/2006	1	Draft Proposed Remedial Action Plan for the Waste Oil Dump	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0311	04.01.00.0037	3/29/2006	1	Draft Proposed Remedial Action Plan for the Waste Oil Dump	Letter	FFTA	Carolyn Turner/NASA	Michelle Price-Fay/EPA
1	0358	04.01.00.0038	8/23/2006	14	email: EPA comments on the Final WOD PRAP	Memo	WOD	Jerry Hoover/EPA	Carolyn Turner/NASA; Paul Herman

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0359	04.01.00.0039	9/28/2006	3	Final PRAP for the FFTA and the WOD and RTC's from VDEQ for the draft WOD PRAP.	Letter	FFTA	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0360	04.01.00.0040	9/28/2006	3	Final PRAP for the FFTA and the WOD and RTC's from VDEQ for the draft WOD PRAP.	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0361	04.01.00.0041	10/11/2006	1	email: VDEQ acceptance of the Final PRAP for the WOD and FFTA	Memo	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA Jerry Hoover/EPA
1	0362	04.01.00.0042	10/31/2006	2	NASA Draft PRAP for the Scrapyard Site (Building N-222) with proposed No Further Action decision	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0363	04.01.00.0043	11/20/2006	2	VDEQ comments on the Draft PRAP for the Scrapyard Site (Building N-222)	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0364	04.01.00.0044	12/6/2006	3	email: NASA response to Public Comment Period format and who has to sign the ROD	Memo	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA Jerry Hoover/EPA
1	0365	04.01.00.0045	12/12/2006	1	email: VDEQ Action item for last meeting re: PRAP Public Notice	Memo	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0366	04.01.00.0046	12/21/2006	2	email: NASA responses to VDEQ comments for the PRAP for the Scrapyard Site (Building N-222)	Memo	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ; Jerry Hoover/EPA
1	0379	04.01.00.0047	12/29/2006	3	email: Response to VDEQ comments Scrapyard PRAP_2006 tracking	Memo	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0380	04.01.00.0048	1/11/2007	1	email: Final PRAPs after incorporating latest round of EPA and DEQ comments.	Memo	WFF	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0386	04.01.00.0049	8/23/2006	14	email: EPA comments on the Final FFTA PRAP	Memo	FFTA	Jerry Hoover/EPA	Carolyn Turner/NASA; Paul Herman
1	0461	04.01.00.0050	12/7/2005	87	email: NASA WFF Waste Oil Dump PRAP Submittal	Memo	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ Michelle Price-Fay/EPA
1	0462	04.01.00.0051	12/12/2006	87	email: Action Item from Last Meeting- PRAP Public Notice	Memo		Paul Herman/VADEQ	Carolyn Turner/NASA
1	0463	04.01.00.0052	1/23/2007	87	EPA and DEQ Comments Pre-Final/Final PRAPs, FFTA, WOD, Scrapyard	Letter	FFTA/ WOD/N- 222	Sheila Briggs- Steuteville/EPA	Carolyn Turner/NASA
1	0464	04.01.00.0053	1/25/2007	2	email: NASA WFF Submittal of word version of WOD, FFTA, Scrapyard PRAPS	Memo	FFTA/ WOD/N- 222	Carolyn Turner/NASA	Paul Herman/VADEQ Sheila Briggs- Steuteville/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0465	04.01.00.0054	2/20/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Proposed Remedial Action Plans for the Former Fire Training area, the Waste Oil Dump, and the Scrapyard Site	Letter	FFTA/ WOD/N- 222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0466	04.01.00.0055	2/26/2007	14	NASA WFF Main Base Firing Range SI WP RTCs	Letter	PR	Carolyn Turner/NASA	Paul Herman/VADEQ Steven Hirsh/EPA Jerry Hoover/EPA
2	1499	04.01.00.0056	8/25/2008	1	Technical Memorandum for Development of Preliminary Remediation Goals, Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ Steven Hirsh/EPA
2	0637	04.01.00.0057	9/4/2008	1	Technical Memorandum Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Theodore J. Meyer/NASA	TtNUS
2	0638	04.01.00.0058	10/7/2008	1	Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0639	04.01.00.0059	10/7/2008	1	Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Steven Hirsh/EPA	Theodore J. Meyer/NASA
2	0640	04.01.00.0060	10/8/2009	1	Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0641	04.01.00.0061	1/13/2009	3	Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0642	04.01.00.0062	1/30/2009	3	Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0643	04.01.00.0063	3/23/2009	8	Response to Comment for Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0644	04.01.00.0064	3/23/2009	8	Response to Comment for Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0645	04.01.00.0065	3/31/2009	1	Acceptance of Response to Comment for Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0646	04.01.00.0066	4/15/2009	3	Response to Comment for Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	email	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0681	04.01.00.0067	5/27/2009	2	Response to Comment for Draft Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0682	04.01.00.0068	7/15/2009	1	Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0683	04.01.00.0069	7/15/2009	1	Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0684	04.01.00.0070	8/18/2009	2	Comments - Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0685	04.01.00.0071	8/25/2009	2	Comments - Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Letter	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0686	04.01.00.0072	9/2/2009	13	Response to Comment for Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Memo	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0687	04.01.00.0073	9/2/2009	7	Response to Comment for Final Feasibility Study Sites 005 and 012, NASA Wallops Flight Facility	Memo	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0688	04.01.00.0074	9/8/2009	1	Additional Response to Regulator Comments on NASA RTC Letter Final FS - Sites 5 and 12, NASA WFF	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0689	04.01.00.0075	9/22/2009	1	Replacement Pages for Final FS, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0690	04.01.00.0076	9/22/2009	1	Revised Final FS, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0691	04.01.00.0077	9/22/2009	1	Revised Final FS, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0692	04.01.00.0078	9/24/2009	1	Replacement Pages for Final FS, Sites 5 and 12, NASA WFF	Letter	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0693	04.01.00.0079	9/30/2009	1	Draft PRAP, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0694	04.01.00.0080	9/30/2009	1	Draft PRAP, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0748	04.01.00.0081	10/19/2009	1	Response to Comments for Final Feasibility Study - Site 5 and Site 12	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0749	04.01.00.0082	10/30/2009	2	Additional Comments for Draft PRAP, Site 5 and Site 12	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0750	04.01.00.0083	1/25/2010	1	Response to VDEQ Comments on the Draft PRAP and Draft-Final PRAP for Site	Letter	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0751	04.01.00.0084	2/9/2010	1	Response to Comments for Final PRAP for Site 5 and Site 12	Letter	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0752	04.01.00.0085	2/9/2010	1	Response to Comments for Final PRAP for Site 5 and Site 12	email	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
					04.02 FC Compliant and Analysis Data	if analisah			
	1			1	04.02 FS Sampling and Analysis Data - Letter Report: Waste Oil Dump	и аррисар	le		
1	0164	04.02.00.0001	11/2/2004	35	Groundwater Sampling Results	Report	WOD	NASA	EPA/VADEQ
				L	04.03 FS Scopes of Work if ap	plicable			
						-			
					04.04 FS Work Plans if appli	cable			
						Cabie			
				- -	04.05 FS ARARs - Initial Scree	ening			
1	0165	04.05.00.0001	7/20/2004	5	Updated Virginia ARARs Summary		WFF		
				04.0	6 FS Treatability Studies/Site Characteriz	ations if ar	nlicable		
	[			04.0					
				- -	04.07 Feasibility Study (FS) R	eport			
1	0268	04.07.00.0001	8/31/2005	289	Feasibility Study for the Former Fire Training Area	Report	FFTA		
1	0269	04.07.00.0002	10/11/2005	261	Feasibility Study for the Waste Oil Dump	Report	WOD		
2	0695	04.07.00.0003	9/22/2009	172	Revised Final Feasibility Study Sites 5 and 12, NASA WFF	Report	5/12	Tetra Tech NUS, Inc	NASA
					04.08 FS Proposed Plans for Selected R	omodial Act	ion		
1	0381	04.08.00.0001	1/11/2007	16	PRAP for FFTA	PRAP	FFTA	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0382	04.08.00.0002	1/11/2007	12	PRAP for WOD	PRAP	WOD	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0383	04.08.00.0003	1/11/2007	12	PRAP for Scrapyard Site	PRAP	N-222	Carolyn Turner/NASA	Jerry Hoover/EPA
2	0778	04.08.00.0004	2/5/2010	15	PRAP for Site 5 - Paint Stain and Site 12 - Former Wind Tunnel	PRAP	5/12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and	Date	No. of	Description of	Doc. Type	Site	Author/Author's	Recipient/Recipient's				
		Document Tracking No.	Bato	pages	Document/Correspondence	Deci Type	Cito	Affiliation	Affiliation				
					5.0 Record of Decision								
	05.01 Correspondence												
1	0166	05.01.00.0001	7/19/2004	2	EPA Comments on the Draft Consensus Document for Site-6 Former Island Fueling Station, Site-8 Former Main Base Fueling System, and Old Aviation Fuel Tank Farm submitted February 2004	Letter	8/6/ AFTF	EPA	NASA				
1	0167	05.01.00.0002	7/19/2004	2	EPA Comments on the Draft Consensus Document for Sites 1, 3, 9, 13, 15, and Construction Debris Landfill submitted February 2004	Letter	8/6/ AFTF	EPA	NASA				
1	0168	05.01.00.0003	8/12/2004	1	FW: NASA WFF Response to EPA Comments for the Draft Consensus Documents for the Virginia DEQ Petroleum Sites	Memo	6/8	Carolyn Turner/ NASA	Garth Glenn/TtNUS; Sue Fields/NASA				
1	0169	05.01.00.0004	8/12/2004	1	FW: NASA WFF Response to EPA Comments for the Draft Consensus Documents for FUD Sites 1, 3, 9, 13, 14, and 15 and Construction Debris Landfill	Memo	WFF	Carolyn Turner/ NASA	Garth Glenn/TtNUS; Sue Fields/NASA				
1	0170	05.01.00.0005	8/16/2004	2	FW: NASA WFF Response to EPA Comments for the Draft Consensus Documents for FUD Sites 1, 3, 9, 13, 14, and 15 and Construction Debris Landfill	Memo	WFF	Carolyn Turner/ NASA	Garth Glenn/TtNUS; Sue Fields/NASA				
1	0171	05.01.00.0006	8/16/2004	5	Final Consensus Documents and Response to Comments on the Formerly Used Defense Sites (FUDS) and Petroleum Sites	Report	WFF	Tt NUS	NASA				
1	0194	05.01.00.0007	11/12/2004	2	VADEQ Comments on the Final Decision Document for Sites 7 and 11 dated July 2004.	Letter	7/11	Paul Herman/VADEQ	Sue Fields/NASA				
1	0195	05.01.00.0008	11/15/2004	1	EPA Comments on the Toxic Substance Control Act Compliance Report for Sites 7 and 11 dated September 2004 and the Final Decision Document for Sites 7 and 11 dated September 2004.	Letter	7/11	Michelle Price- Fay/EPA	Sue Fields/NASA				

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0196	05.01.00.0009	11/30/2004	4	NASA Response to EPA and VADEQ Comments on the Decision Documents for Sites 7 and 11.	Letter	7/11	Carolyn Turner/NASA	Project Team
1	0197	05.01.00.0010	11/30/2004	1	EPA Response to NASA Response to Comments on the Decision Documents for Sites 7 and 11.	Letter	7/11	Michelle Price- Fay/EPA	Project Team
1	0206	05.01.00.0011	12/21/2004	1	VADEQ Response to NASA Response to Comments on the Decision Documents for Sites 7 and 11.	Letter	7/11	Paul Herman/VADEQ	Project Team
1	0467	05.01.00.0012	4/11/2007	2	Draft Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0468	05.01.00.0013	4/11/2007	2	Draft Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0469	05.01.00.0014	5/18/2007	35	Comments Draft Record of Decision for the Former Fire Training Area	Letter	FFTA	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0470	05.01.00.0015	5/24/2007	2	NASA Goddard Space Flight Center Wallops Flight Facility Draft Record of Decision Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0471	05.01.00.0016	5/24/2007	3	email: NASA Wallops Flight Facility-Draft ROD for Former Fire Training Area	Memo	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0472	05.01.00.0017	5/24/2007	15	Comments NASA Goddard Space Flight Center Wallops Flight Facility Draft Record of Decision Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0473	05.01.00.0018	6/5/2007	2	Comments NASA Goddard Space Flight Center Wallops Flight Facility Draft Record of Decision Scrapyard Site	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0474	05.01.00.0019	6/20/2007	25	Comments Draft Record of Decision for the NASA WFF Scrapyard Site	Letter	N-222	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0475	05.01.00.0020	7/5/2007	12	Response to Regulatory Comments on the Draft Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0476	05.01.00.0021	7/5/2007	12	Response to Regulatory Comments on the Draft Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0477	05.01.00.0022	7/20/2007	2	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments-Draft Record of Decision Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0478	05.01.00.0023	7/23/2007	3	email: NASA Wallops -RTCs on Draft ROD for the FFTA	Memo	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0479	05.01.00.0024	8/7/2007	25	Response to Regulatory Comments on the Draft Record of Decision for the Scrapyard Site at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops island, Virginia	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0480	05.01.00.0025	8/7/2007	25	Response to Regulatory Comments on the Draft Record of Decision for the Scrapyard Site at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops island, Virginia	Letter	N-222	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0481	05.01.00.0026	8/31/2007	1	NASA Goddard Space Flight Center Wallops Flight Facility Response to Comments-Draft Record of Decision Former Scrapyard Site	Letter	N-222	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0482	05.01.00.0027	9/12/2007	1	email: NASA WFF Former Fire Training Area ROD (final)	Memo	FFTA	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0483	05.01.00.0028	10/18/2007	1	email: NASA WFF - Waste Oil Dump ROD	Memo	WOD	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0484	05.01.00.0029	10/29/2007	8	NASA WFF Draft Response to DEQ Comment; WOD ROD	Memo	WOD	Paul Herman/VADEQ Steven Hirsh/EPA	Carolyn Turner/NASA
1	0485	05.01.00.0030	11/1/2007	41	email: EPA's comments on Draft WOD ROD	Memo	WOD	Steven Hirsh/EPA	Carolyn Turner/NASA
1	0486	05.01.00.0031	11/2/2007	1	email: Draft Scrapyard ROD RTC	Memo	N-222	Dawn Fulsher/EPA	Carolyn Turner/NASA
1	0487	05.01.00.0032	11/2/2007	1	email: Draft Scrapyard ROD RTC	Memo	N-222	Dawn Fulsher/EPA	Carolyn Turner/NASA
1	0488	05.01.00.0033	11/6/2007	1	Final Record of Decision for Former Fire Training Area NASA Wallops Flight Facility Wallops Island, Virginia	Letter	FFTA	Chris Evans/VADEQ	James Burke/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0489	05.01.00.0034	11/28/2007	5	Response to the Environmental Protection Agency Comments on the Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0490	05.01.00.0035	11/29/2007	1	Final Record of Decision for the Scrapyard Site at NASA Goddard Space Flight Center's Wallops Flight Facility Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0491	05.01.00.0036	12/4/2007	1	Final Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Steven Hirsh/EPA
1	0492	05.01.00.0037	12/4/2007	1	Final Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0493	05.01.00.0038	12/19/2007	3	email: ORC's proposed changes to the Final Scrapyard ROD	Memo	N-222	Dawn Fulsher/EPA	Carolyn Turner/NASA
2	0494	05.01.00.0039	1/8/2008	4	email: WOD RTC	Memo	WOD	Carolyn Turner/NASA	Dawn Fulsher/EPA
2	0580	05.01.00.0040	1/9/2008	1	Final Record of Decision for the Scrapyard Site at NASA Goddard Space Flight Center's Wallops Flight Facility Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0495	05.01.00.0041	1/9/2008	2	Final Record of Decision for the Scrapyard Site at NASA Goddard Space Flight Center's Wallops Flight Facility Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0496	05.01.00.0042	1/14/2008	1	Final Record of Decision for the Scrapyard Site NASA Wallops Flight Facility Wallops Island, Virginia	Letter	N-222	Chris Evans/VADEQ	James Burke/EPA
2	0497	05.01.00.0043	1/22/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Record of Decision Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0498	05.01.00.0044	2/1/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0499	05.01.00.0045	2/1/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0500	05.01.00.0046	2/6/2008	1	Final Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0501	05.01.00.0047	2/6/2008	1	Final Record of Decision for the Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0502	05.01.00.0048	2/19/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Revised Draft Record of Decision Waste Oil Dump	Letter	WOD	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0503	05.01.00.0049	3/17/2008	1	ORC comments on "final" Wallops Waste Oil Dump ROD	Memo	WOD	Dawn Fulsher/EPA	Carolyn Turner/NASA
2	0504	05.01.00.0050	4/1/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0505	05.01.00.0051	4/1/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0506	05.01.00.0052	4/4/2008	1	Final Record of Decision for Waste Oil Dump NASA Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Karen Jackson Sismour/VADEQ	James Burke/EPA
2	0507	05.01.00.0053	4/4/2008	1	Final Record of Decision for the Scrapyard Site at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0508	05.01.00.0054	4/4/2008	1	Final Record of Decision for the Scrapyard Site at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	N-222	Carolyn Turner/NASA	Steven Hirsh/EPA
2	0551	05.01.00.0055	5/20/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0552	05.01.00.0056	5/20/2008	1	Final Record of Decision for the Waste Oil Dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WOD	Carolyn Turner/NASA	Steven Hirsh/EPA
2	1498	05.01.00.0057	12/12/2008	2	Draft Decision Document for Archive Search Report Sites, NASA Wallops Flight Facility	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0647	05.01.00.0058	2/10/2009	1	Draft Decision Document for Archive Search Report Sites, NASA Wallops Flight Facility	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0648	05.01.00.0059	3/18/2009	1	Revised Decision Document for Archive Search Report Sites, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0649	05.01.00.0060	4/21/2009	1	Response to Comment for Decision Document for Archive Search Report Sites, NASA Wallops Flight Facility	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0696	05.01.00.0061	7/30/2009	1	Final Decision Document for Archive Search Report Sites at NASA WFF	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0697	05.01.00.0062	7/30/2009	1	Final Decision Document for Archive Search Report Sites at NASA WFF	Letter	WFF	Steven Hirsh/EPA	Theodore J. Meyer/NASA
2	0817	05.01.00.0063	3/8/2010	1	Draft Record of Decision for Sites 5 and 12, WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0818	05.01.00.0064	3/8/2010	1	Draft Record of Decision for Sites 5 and 12, WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0819	05.01.00.0065	3/8/2010	1	Draft Record of Decision for Sites 5 and 12, WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0820	05.01.00.0066	4/9/2010	3	Draft Record of Decision, Site 5 - Paint Stain and Site 12 - Former Wind Tunnel	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0821	05.01.00.0067	7/14/2010	1	Response to VDEQ Comments, Draft Record of Decision - Site 5 Paint Stain and Site 12 Former Wind Tunnel	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0822	05.01.00.0068	7/16/2010	2	Draft Final Record of Decision of Sites 5 and 12	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0823	05.01.00.0069	7/16/2010	2	Draft Final Record of Decision of Sites 5 and 12	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0915	05.01.00.0070	7/22/2010	7	DRAFT Final ROD Sites 5 and 12 text changes	email	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0824	05.01.00.0071	8/24/2010	4	Sites 5 and 12, ROD Sections	email	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Flusher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0825	05.01.00.0072	8/24/2010	2	Sites 5 and 12, ROD Sections	email	5 and 12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0826	05.01.00.0073	8/24/2010	2	Sites 5 and 12, ROD Sections	email	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0827	05.01.00.0074	8/25/2010	3	Sites 5 and 12, ROD Sections	email	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0828	05.01.00.0075	8/26/2010	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Garth Glenn/Tetra Tech NUS	Theodore J. Meyer/NASA
2	0829	05.01.00.0076	9/13/2010	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Durwood Willis/VADEQ	Ronald Borsellina/EPA
2	0830	05.01.00.0077	5/26/2011	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0831	05.01.00.0078	5/26/2011	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0832	05.01.00.0079	5/26/2011	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0968	05.01.00.0080	10/3/2011	1	Email: Final Revised Record of Decision - Sites 5 and 12	Memo	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Flusher/EPA
2	0969	05.01.00.0081	11/2/2011	1	Final Record of Decision - Sites 5 and 12	Letter	5 and 12	Durwood H. Willis/VADEQ	Ronald Borsellina/EPA
2	0970	05.01.00.0082	12/14/2011	1	Final Record of Decision - Sites 5 and 12, NASA WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0971	05.01.00.0083	12/14/2011	1	Final Record of Decision - Sites 5 and 12, NASA WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0972	05.01.00.0084	12/14/2011	1	Final Record of Decision - Sites 5 and 12, NASA WFF	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
	1647	05.01.00.0085	10/11/2016	1	Final Consensus Documents for NFA at North Island Transformers 2 thru16	letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1648	05.01.00.0086	10/11/2016	1	Final Consensus Documents for NFA at North Island Transformers 2 thru16	letter	NIT	David Liu/NASA	Paul Herman/VDEQ
	1649	05.01.00.0087	10/11/2016	1	Final Consensus Documents for NFA at North Island Transformers 2 thru16	letter	NIT	David Liu/NASA	Steven Hirsh/EPA
	1650	05.01.00.0088	2/3/2017	1	Draft Final Site 9 Record of Decision w/ Response to Comments track changes	email	WFF	David Liu/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Flusher/EPA
	1680	05.01.00.0089	11/25/2016	1	Final Consensus Document for North Island Transformers	email	NIT	Lorie Baker/EPA	David Liu/NASA
					05.02 Responsiveness Summaries - Admi	inistrativo Ro	cord		
					Aum				

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
				1	05.03 Scopes of Work				
1	0070	05.03.00.0001	2/7/2002	4	Preliminary Identification, Commonwealth of Virginia, Applicable, Relevant & Appropriate Requirements (ARARs)	Letter	WFF	VADEQ	NASA
					05.04 Work Plans				
	1				03.04 WOLK FIGHS				
					05.05 Interagency or Federal Facility	Agreements			
					05.06 ARARs				
1	0172	05.06.00.0001	7/19/2004	5	Updated Virginia ARARs Summary		WFF		
	1				05.07 Records of Decision Final Decision Document for Building N-	n			
1	0071	05.07.00.0001	2/24/2003	69	161C PCB Transformer Pad Site NASA Wallops Flight Facility	Report	N-161	Tetra Tech NUS, Inc.	NASA
1	0095	05.07.00.0002	8/1/2003	156	Final Decision Document for Advance Data Acquisition Support Facility (ADAS) Site NASA Wallops Flight Facility	Report	10	Tetra Tech NUS, Inc.	NASA
1	0173	05.07.00.0003	9/1/2004	8	Consensus Document; Sites 1, 3, 9, 13, 14, and 15, and Construction Debris Landfill and Industrial/Sanitary Landfill Sites	Report	WFF	Sue Fields	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0174	05.07.00.0004	9/1/2004	42	Consensus Document; Site 6 - Former Island Fueling Station, Site 8 - Former Main Base Fueling System, and Old Aviation Fuel Tank Farm	Report	6/8/ AFTF	Sue Fields	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0270	05.07.00.0005	1/1/2005	178	Final Decision Document for Sites 7 and 11	Report	7/11	Tetra Tech NUS, Inc.	NASA
1	0509	05.07.00.0006	12/1/2007	70	Record of Decision Former Fire Training Area NASA Wallops Flight Facility Wallops island, Virginia	Report	FFTA	Tetra Tech NUS, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0510	05.07.00.0007	1/1/2008	49	Record of Decision Scrapyard Site NASA Wallops Flight Facility Wallops island, Virginia	Report	N-222	Tetra Tech NUS, Inc.	NASA
2	0511	05.07.00.0008	3/1/2008	64	Record of Decision Waste Oil Dump NASA Wallops Flight Facility Wallops island, Virginia	Report	WOD	Tetra Tech NUS, Inc.	NASA
2	0650	05.07.00.0009	3/18/2009	5	Revised Decision Document for Archive Search Report Sites, NASA Wallops Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0698	05.07.00.0010	6/17/2009	102	Final Decision Document for Archive Search Report Sites at NASA WFF	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0973	05.07.00.0011	10/1/2011	80	Record of Decision Site 5 - Paint Stain and Site 12 - Former Wind Tunnel, NASA Wallops Flight Facility Wallops Island, Virginia	Report	12-May	Tetra Tech, Inc.	NASA
	1555	05.07.00.0012	9/1/2015	251	Study Area Screening Evaluation Former Navy Sites	Report	WFF	Tetra Tech, Inc.	NASA

		EPA AR											
DVD	ID No.	Category and	Date	No. of	Description of	Doc. Type	Site	Author/Author's	<b>Recipient/Recipient's</b>				
		Document	Date	pages	Document/Correspondence	Doc. Type	Sile	Affiliation	Affiliation				
		Tracking No.											
	6.0 Remedial Design 06.01 Correspondence												
		[		1	Remedial design for Land Use Controls	[ ]							
2	0512	06.01.00.0001	3/12/2008	1	and Pilot Study Work Plan, Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Paul Herman/VADEQ				
2	0513	06.01.00.0002	3/12/2008	1	Remedial design for Land Use Controls and Pilot Study Work Plan, Former Fire Training Area at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Carolyn Turner/NASA	Steven Hirsh/EPA				
2	0514	06.01.00.0003	4/8/2008	2	NASA Goddard Space Flight Center Wallops Flight Facility Draft Remedial design for Land Use Controls Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA				
2	0515	06.01.00.0004	4/23/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Pilot Study Work Plan Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Carolyn Turner/NASA				
2	0579	06.01.00.0005	5/9/2008	1	Re: Draft Remedial Design for Land Use Controls for the Fire Fighting Training Area	Letter	FFTA	Dawn Fulsher/EPA	Carolyn Turner/NASA				
2	0581	06.01.00.0006	7/29/2008	1	NASA Wallops Flight Facility - RTC to Draft Remedial Design for LUC, Former Fire Training Area	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA				
2	0582	06.01.00.0007	7/29/2008	1	NASA Wallops Flight Facility - Former Fire Training Area Pilot Study Work Plan RTCs	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA				
2	0583	06.01.00.0008	8/22/2008	1	Regulatory RTCs - Draft Remedial Design for LUCs, Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA				
2	0584	06.01.00.0009	8/28/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Pilot Study Work Plan Waste Oil Dump Site - Comments	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA				
2	0585	06.01.00.0010	9/2/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Remedial Design for LUCs for Waste Oil Dump Site- Comments	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA				

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0586	06.01.00.0011	9/12/2008	2	Draft Pilot Study Work Plan for Waste Oil Dump - Comments	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0587	06.01.00.0012	9/12/2008	2	Draft Remedial Design for LUC for Waste Oil Dump - Comments	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0588	06.01.00.0013	9/29/2008	5	RTC for Waste Oil Dump Draft Pilot Study Work Plan and Draft Remedial Design LUC, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0589	06.01.00.0014	9/29/2008	5	RTC for Waste Oil Dump Draft Pilot Study Work Plan and Draft Remedial Design LUC, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0590	06.01.00.0015	10/1/2008	5	ORC MSDS for Waste Oil Dump and Former Fire Training Area Pilot Study Injection Control Permit	email	WOD /FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0591	06.01.00.0016	10/1/2008	3	RTC for Former Fire Training Area Draft Pilot Study Work Plan and Draft Remedial Design LUC, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0592	06.01.00.0017	10/7/2008	1	RTC for Waste Oil Dump Remedial Design LUC, NASA Wallops Flight Facility	email	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0593	06.01.00.0018	10/7/2008	1	RTC for Waste Oil Dump Pilot Study Work Plan, NASA Wallops Flight Facility	email	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0594	06.01.00.0019	10/15/2008	1	Waste Oil Dump Pilot Study, NASA Wallops Flight Facility	email	WOD	Theodore J. Meyer/NASA	Garth Glenn/Tetra Tech NUS
2	0595	06.01.00.0020	10/16/2008	2	RTC for Waste Oil Dump Draft Pilot Study Work Plan , NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0596	06.01.00.0021	10/27/2008	1	Draft Pilot Study Work Plan for Former Fire Training Area - NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0597	06.01.00.0022	10/27/2008	1	Draft Remedial Design for LUCs, Former Fire Training Area - NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0598	06.01.00.0023	10/31/2008	1	Final Pilot Study Work Plan and Final Remedial Design for LUC for Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.			Final Pilot Study Work Plan and Final				
2	0599	06.01.00.0024	10/31/2008	1	Remedial Design for LUC for Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0600	06.01.00.0025	10/31/2008	1	Final Pilot Study Work Plan and Final Remedial Design for LUC for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0601	06.01.00.0026	10/31/2008	1	Final Pilot Study Work Plan and Final Remedial Design for LUC for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0602	06.01.00.0027	12/2/2008	1	Final Pilot Study Work Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0603	06.01.00.0028	12/2/2008	1	Final Remedial Design for LUC for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0604	06.01.00.0029	12/2/2008	1	Final Pilot Study Work Plan for Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0605	06.01.00.0030	12/2/2008	1	Final Remedial Design for LUC for Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0606	06.01.00.0031	12/12/2008	1	Waste Oil Dump and Former Fire Training Area Pilot Study Status Update and notification of field changes , NASA Wallops Flight Facility	email	WOD /FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA Paul Herman/VDEQ
2	0607	06.01.00.0032	2/6/2009	1	Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0608	06.01.00.0033	2/6/2009	1	Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0609	06.01.00.0034	3/5/2009	1	Comments, Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0610	06.01.00.0035	3/16/2009	2	RTCs, Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0611	06.01.00.0036	4/6/2009	1	RTCs acceptance, Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0612	06.01.00.0037	4/14/2009	1	Final Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0613	06.01.00.0038	4/14/2009	1	Final Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0614	06.01.00.0039	4/15/2009	1	RTCs, Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1028	06.01.00.0040	1/27/2012	2	EPA Comments on the Draft Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1029	06.01.00.0041	1/31/2012	2	VADEQ Comments on the Draft Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1030	06.01.00.0042	2/28/2012	4	NASA's Response to Comments from EPA and VDEQ Comments on the Draft Remedial Design/Pre-Design Investigation Work Plans for Sites 5 and 12, NASA Wallops Flight Facility	email	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1031	06.01.00.0043	3/5/2012	7	NASA's updated Response to Comments from EPA and VDEQ Comments on the Draft Remedial Design/PreDesign Investigation Work Plans for Sites 5 and 12, NASA Wallops Flight Facility	email	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1032	06.01.00.0044	3/12/2012	3	Response to Comments VDEQ Acceptance on the Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	email	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1033	06.01.00.0045	3/22/2012	1	Final Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1034	06.01.00.0046	3/22/2012	1	Final Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1035	06.01.00.0047	3/22/2012	1	Final Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1036	06.01.00.0048	4/6/2012	1	VDEQ considers the Final Remedial Design Work Plan for Sites 5 and 12 to be final, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1037	06.01.00.0049	5/30/2012	1	Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Robert Cole/U.S. Army Corps of Engineers
2	1038	06.01.00.0050	5/30/2012	1	Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1039	06.01.00.0051	5/30/2012	1	Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1040	06.01.00.0052	5/30/2012	1	Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1041	06.01.00.0053	6/18/2012	1	VDEQ Comments on the Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	email	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1042	06.01.00.0054	10/3/2012	4	VDEQ Comments on the Draft Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1044	06.01.00.0055	5/21/2012	1	Wetland Delineation Report for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Ed Corack/Tetra Tech, Inc.	Theodore J. Meyer/NASA
2	1112	06.01.00.0056	10/3/2012	4	VDEQ Comments on the Draft Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1113	06.01.00.0057	12/12/2012	2	EPA Comments on the Draft Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1114	06.01.00.0058	1/7/2013	8	NASA's Response to Comments from EPA and VDEQ Comments on the Draft Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	email	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1115	06.01.00.0059	1/8/2013	1	VDEQ offers no further comment on the Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1116	06.01.00.0060	1/8/2013	1	EPA has determined that NASA's Response to EPA's comments is acceptable on the Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1117	06.01.00.0061	2/5/2013	2	Notice of intent to implement Final Remedial Action at Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Robert Cole/U.S. Army Corps of Engineers
2	1118	06.01.00.0062	2/5/2013	1	Final Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1119	06.01.00.0063	2/5/2013	1	Final Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1120	06.01.00.0064	2/5/2013	1	Final Remedial Design/Remedial Action Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1121	06.01.00.0065	2/11/2013	1	VDEQ offers no further comment and considers the Final Remedial Design/Remedial Action Work Plan for Sites 5 and 12 to be final, NASA Wallops Flight Facility	Letter	5 and 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1122	06.01.00.0066	2/19/2013	1	EPA accepts and considers the Final Remedial Design/Remedial Action Work Plan for Sites 5 and 12 to be final, NASA Wallops Flight Facility	Letter	5 and 12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
					06.02 Sampling and Analysis	Data	<u> </u>		
					06.03 Scopes of Work				
	l				06.04 Work Plans and Progress	Reports			
2	0615	06.04.00.0001	10/31/2008	212	Final Pilot Study Work Plan for Waste Oil Dump, NASA Wallops Flight Facility	WP	WOD	NASA	VDEQ/EPA
2	0616	06.04.00.0002	10/31/2008	173	Final Pilot Study Work Plan for Former Fire Training Area, NASA Wallops Flight Facility	WP	FFTA	NASA	VDEQ/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0617	06.04.00.0003	4/14/2009	15	Final Free Product Monitoring Plan for the Former Fire Training Area, NASA Wallops Flight Facility	WP	FFTA	NASA	VDEQ/EPA
2	0731	06.04.00.0004	7/20/2009	5	Final Letter Work Plan for Additional Groundwater Investigation Activities, FFTA, NASA WFF	WP	FFTA	NASA	VDEQ/EPA
2	1043	06.04.00.0005	3/14/2012	211	Final Remedial Design Work Plan for Sites 5 and 12, NASA Wallops Flight Facility	WP	5 and 12	Tetra Tech NUS, Inc.	NASA
					06.05 Cost Reports and Invo	icoc			
				1		1003			
	- -			-	06.06 Interagency and Cooperative	Agreements	•		
				00.07	Applicable or Delevent and Appropriate [				
				06.07	Applicable or Relevant and Appropriate F	kequirement	S (ARARS)		
	1				06.08 Remedial Design Docum	nents			
2	0618	06.08.00.0001	10/31/2008	19	Final Remedial Design for Land Use Controls Waste Oil Dump, NASA Wallops Flight Facility	Report	WOD	NASA	VDEQ/EPA
2	0619	06.08.00.0002	10/31/2008	19	Final Remedial Design for Land Use Controls Former Fire Training Area, NASA Wallops Flight Facility	Report	FFTA	NASA	VDEQ/EPA
2	1045	06.08.00.0003	5/21/2012	79	Wetland Delineation Report, Sites 5 and 12, NASA Wallops Flight Facility	Report	5 and 12	Tetra Tech, Inc.	NASA
2	1123	06.08.00.0004	6/29/2012	7	Preliminary Jurisdictional Determination, Sites 5 and 12, NASA Wallops Flight Facility	Letter	5 and 12	Robert Cole/U.S. Army Corps of Engineers	Theodore J. Meyer/NASA
2	1124	06.08.00.0005	1/21/2013	591	Final Remedial Design and Remedial Action Work Plan, Sites 5 and 12, NASA Wallops Flight Facility	Report	5 and 12	Tetra Tech, Inc.	NASA

DVD	ID No.	EPA AR Category and	Date	No. of	Description of	Doc. Type	Site	Author/Author's	Recipient/Recipient's
		Document Tracking No.	2410	pages	Document/Correspondence			Affiliation	Affiliation
					7.0 Remedial Action				
	1				07.01 Correspondence				
2	0569	07.01.00.0001	6/26/2008	8	Response to Regulatory Comments for the Former Fire Training Area Draft Remedial Design for Land Use Controls and Draft Pilot Study Work Plan for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0570	07.01.00.0002	6/26/2008	8	Response to Regulatory Comments for the Former Fire Training Area Draft Remedial Design for Land Use Controls and Draft Pilot Study Work Plan for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0571	07.01.00.0003	7/29/2008	1	NASA Wallops Flight Facility-RTCs to Draft Remedial Design for Land Use Controls, FFTA	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0572	07.01.00.0004	7/29/2008	1	NASA Wallops Flight Facility-Former Fire Training Area Pilot Study Work Plan RTCs	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0651	07.01.00.0189	3/26/2009	1	Draft Remedial Action Work Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0652	07.01.00.0005	3/26/2009	1	Draft Remedial Action Work Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0699	07.01.00.0006	5/5/2009	1	Draft LTM Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0700	07.01.00.0007	5/5/2009	1	Draft LTM Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0701	07.01.00.0008	5/21/2009	1	Comments - Draft Remedial Action Work Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0702	07.01.00.0009	6/8/2009	2	Comments - Draft LTM Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0703	07.01.00.0010	6/10/2009	2	Comments - Draft LTM Plan for Waste Oil Dump, NASA Wallops Flight Facility	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0704	07.01.00.0011	6/12/2009	2	Comments - Pilot Study Report FFTA, NASA WFF	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0705	07.01.00.0012	7/20/2009	2	Letter Work Plan and Response to Comments on the Pilot Study Report for the FFTA at NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0706	07.01.00.0013	7/20/2009	4	Letter Work Plan and Response to Comments on the Pilot Study Report for the FFTA at NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0707	07.01.00.0014	7/21/2009	3	Response to Regulatory Comments for the Draft Remedial Action Work Plan for WOD, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0708	07.01.00.0015	7/21/2009	3	Response to Regulatory Comments for the Draft Remedial Action Work Plan for WOD, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0709	07.01.00.0016	7/31/2009	1	Response to Comments - FFTA, Pilot Study Report and Letter Work Plan for additional sampling, NASA WFF	e-mail	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0710	07.01.00.0017	8/4/2009	1	Response to Comments - FFTA, Pilot Study Report, NASA WFF	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0711	07.01.00.0018	8/19/2009	1	Response to Comment - Draft Remedial Action Work Plan, Waste Oil Dump, NASA WFF	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0712	07.01.00.0019	8/26/2009	1	Response to Comment - Draft Remedial Action Work Plan, Waste Oil Dump, NASA WFF	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0713	07.01.00.0020	8/28/2009	2	Draft Long term monitoring Plan for the Waste Oil Dump, NASA WF	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0714	07.01.00.0021	9/8/2009	1	Additional Response to Regulatory Comments on NASA Response to Comments Letter, Draft remedial Action Work Plan for Waste oil Dump, NASA WFF	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0715	07.01.00.0022	9/29/2009	10	Response to Comments for the Draft Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0716	07.01.00.0023	9/30/2009	1	Draft Proposed Remedial Action Plan, Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0717	07.01.00.0024	9/30/2009	1	Final Remedial Action Work Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0718	07.01.00.0025	9/30/2009	1	Final Remedial Action Work Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0719	07.01.00.0026	9/30/2009	1	Final Remedial Action Work Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0720	07.01.00.0027	10/1/2009	1	Response to Comments, Draft Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0721	07.01.00.0028	10/14/2009	1	Final Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0722	07.01.00.0029	10/14/2009	1	Final Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0723	07.01.00.0030	10/14/2009	1	Final Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0753	07.01.00.0031	10/19/2009	2	Acceptance of VDEQ Request for Final Remedial Action Work Plan for Waste Oil Dump, NASA WFF	email	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0754	07.01.00.0032	10/19/2009	2	Acceptance of VDEQ Request for Final Remedial Action Work Plan for Waste Oil Dump, NASA WFF	email	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0755	07.01.00.0033	10/20/2009	1	Acceptance of Final Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0756	07.01.00.0034	12/1/2009	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0757	07.01.00.0035	12/1/2009	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0758	07.01.00.0036	12/1/2009	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0759	07.01.00.0037	12/9/2009	1	Acceptance of Final Long Term Monitoring Plan for Waste Oil Dump, NASA WFF	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0760	07.01.00.0038	12/17/2009	2	Comments on Draft Data Summary Report for Additional Groundwater Investigation Activities, NASA WFF	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0761	07.01.00.0039	1/12/2010	1	Response to Comments for Revised PRAP for Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0762	07.01.00.0040	1/12/2010	8	Response to Comments for Revised PRAP for Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0763	07.01.00.0041	1/12/2010	8	Response to Comments for Revised PRAP for Sites 5 and 12, NASA WFF	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0764	07.01.00.0042	1/26/2010	2	Summary of Teleconference for Sites 5 and 12, NASA WFF	email	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0765	07.01.00.0043	1/26/2010	2	Summary of Teleconference for Sites 5 and 12, NASA WFF	email	5/12	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0766	07.01.00.0044	2/9/2010	2	Comments for Draft Data Summary Report for Additional Groundwater Investigation at the FFTA, NASA WFF	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0834	07.01.00.0045	2/9/2010	1	Sites 5 and 12 PRAP	email	5/12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0835	07.01.00.0046	2/9/2010	1	FFTA March Sampling Letter	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0836	07.01.00.0047	3/15/2010	1	Final proposed remedial action plan for sties 5 and 12	Letter	5/12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0837	07.01.00.0048	3/15/2010	1	Final proposed remedial action plan for sties 5 and 12	Letter	5/12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0838	07.01.00.0049	3/15/2010	1	Final proposed remedial action plan for sties 5 and 12	Letter	5/12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0839	07.01.00.0050	3/23/2010	1	RRTA RTC Draft Data summary report for additional groundwater sampling activities	email	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0840	07.01.00.0051	3/23/2010	1	RRTA RTC Draft Data summary report for additional groundwater sampling activities	email	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0841	07.01.00.0052	3/23/2010	2	RRTA RTC Draft Data summary report for additional groundwater sampling activities	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0842	07.01.00.0053	3/23/2010	2	RRTA RTC Draft Data summary report for additional groundwater sampling activities	email	FFTA	Theodore J. Meyer/NASA	Garth Glenn/Tetra Tech NUS
2	0843	07.01.00.0054	4/12/2010	1	Final Data Summary Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0844	07.01.00.0055	4/12/2010	1	Final Data Summary Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0845	07.01.00.0056	4/12/2010	1	Final Data Summary Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0846	07.01.00.0057	4/28/2010	1	Draft long Term Monitoring Plan for FFTA at WFF	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0847	07.01.00.0058	4/28/2010	1	Draft long Term Monitoring Plan for FFTA at WFF	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0848	07.01.00.0059	4/28/2010	1	Draft long Term Monitoring Plan for FFTA at WFF	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0849	07.01.00.0060	6/1/2010	1	Final Data Summary Report for Additional Groundwater Investigation - FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0850	07.01.00.0061	6/8/2010	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0851	07.01.00.0062	6/8/2010	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0852	07.01.00.0063	6/8/2010	1	Draft Data Summary Report for the Former Fire Training Area, NASA WFF	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0853	07.01.00.0064	6/8/2010	1	Draft Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0854	07.01.00.0065	6/8/2010	1	Draft Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0855	07.01.00.0066	6/8/2010	1	Draft Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0856	07.01.00.0067	6/11/2010	2	Draft Long Term Monitoring Report - FFTA	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0857	07.01.00.0068	6/11/2010	1	Final Data Summary Report for Additional Groundwater Investigation - FFTA	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0858	07.01.00.0069	6/15/2010	2	Draft Long Term Monitoring Plan - Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0859	07.01.00.0070	7/1/2010	1	RTC on Long Term Monitoring Plan for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0860	07.01.00.0071	7/1/2010	1	RTC on Long Term Monitoring Plan for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0861	07.01.00.0072	7/1/2010	1	RTC on Long Term Monitoring Plan for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0862	07.01.00.0073	7/16/2010	2	Draft Final Record of Decision for Sites 5 and 12 at NASA WFF	Letter	5and 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0863	07.01.00.0074	7/19/2010	2	Draft Remedial Action Completion Report for WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0864	07.01.00.0075	7/19/2010	2	Draft Remedial Action Completion Report for WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0865	07.01.00.0076	7/22/2010	1	Data Summary Report for Additional Groundwater Sampling - Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0866	07.01.00.0077	8/6/2010	2	Final Long Term Monitoring Plan for Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0867	07.01.00.0078	8/6/2010	2	Final Long Term Monitoring Plan for Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0868	07.01.00.0079	8/6/2010	2	Final Long Term Monitoring Plan for Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0869	07.01.00.0080	8/16/2010	1	Final Removal Action Work Plan for non- time critical removal action for soil - Site 4 - Island Debris Pile	Letter	4	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0870	07.01.00.0081	8/18/2010	1	Final Data Summary Report for Additional Groundwater Investigation - FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0871	07.01.00.0082	8/18/2010	1	Final Data Summary Report for Additional Groundwater Investigation - FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0872	07.01.00.0083	8/18/2010	1	Final Data Summary Report for Additional Groundwater Investigation - FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0873	07.01.00.0084	8/18/2010	1	Data Summary Report for 6-month post- injection sampling at Waste Oil Dump Site	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0874	07.01.00.0085	8/18/2010	1	Data Summary Report for 6-month post- injection sampling at Waste Oil Dump Site	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0875	07.01.00.0086	8/18/2010	1	Data Summary Report for 6-month post- injection sampling at Waste Oil Dump Site	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0876	07.01.00.0087	8/26/2010	1	Final Long Term Monitoring Plan - Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0877	07.01.00.0088	12/10/2010	1	Data Summary Report for Sept 1010 Groundwater Investigation at the Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0878	07.01.00.0089	12/10/2010	1	Data Summary Report for Sept 1010 Groundwater Investigation at the Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0879	07.01.00.0090	12/10/2010	1	Data Summary Report for Sept 1010 Groundwater Investigation at the Former Fire Training Area	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0880	07.01.00.0091	12/13/2010	1	Draft Remedial Action Completion Report for the Waste Oil Dump	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0881	07.01.00.0092	12/30/2010	1	Data Summary Report for the September 2010 Groundwater Investigation at the WOD Site	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0882	07.01.00.0093	12/30/2010	1	Data Summary Report for the September 2010 Groundwater Investigation at the WOD Site	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0883	07.01.00.0094	12/30/2010	1	Data Summary Report for the September 2010 Groundwater Investigation at the WOD Site	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0884	07.01.00.0095	1/24/2011	4	WOD RACR RTCs	email	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA, Dawn Fulsher/EPA, Paul Herman/VADEQ
2	0885	07.01.00.0096	1/28/2011	1	Response to VDEQ comments on Draft Remedial Action Completion Report for Waste Oil Dump Site.	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0886	07.01.00.0097	3/16/2011	1	Annual Groundwater Monitoring Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0887	07.01.00.0098	3/16/2011	1	Annual Groundwater Monitoring Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0888	07.01.00.0099	3/16/2011	1	Annual Groundwater Monitoring Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0889	07.01.00.0100	3/16/2011	1	Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0890	07.01.00.0101	3/16/2011	1	Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0891	07.01.00.0102	3/16/2011	1	Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0895	07.01.00.0103	3/31/2011	1	NASA RTC to EPA's comments on the Draft Remedial Action Completion Report = WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0896	07.01.00.0104	3/31/2011	1	NASA RTC to EPA's comments on the Draft Remedial Action Completion Report = WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0897	07.01.00.0105	3/31/2011	1	NASA RTC to EPA's comments on the Draft Remedial Action Completion Report = WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0898	07.01.00.0106	3/31/2011	1	Final Long Term Monitoring Plan Report for the FFTA	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0899	07.01.00.0107	4/6/2011	1	Final Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0900	07.01.00.0108	4/6/2011	1	Final Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0901	07.01.00.0109	4/6/2011	1	Final Remedial Action Completion Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0902	07.01.00.0110	4/14/2011	1	Annual Groundwater Monitoring Report- Waste Oil Dump	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0903	07.01.00.0111	5/1/2011	1	Remedial Action Completion Report for the FFTA at NASA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0904	07.01.00.0112	5/1/2011	1	Remedial Action Completion Report for the FFTA at NASA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0905	07.01.00.0113	5/1/2011	1	Remedial Action Completion Report for the FFTA at NASA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0906	07.01.00.0114	6/22/2011	1	Data Summary Report of the March 2011 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0907	07.01.00.0115	6/22/2011	1	Data Summary Report of the March 2011 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0908	07.01.00.0116	6/22/2011	1	Data Summary Report of the March 2011 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0909	07.01.00.0117	6/22/2011	1	Data Summary Report for the March 2011 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0910	07.01.00.0118	6/22/2011	1	Data Summary Report for the March 2011 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0911	07.01.00.0119	6/22/2011	1	Data Summary Report for the March 2011 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0912	07.01.00.0120	6/22/2010	1	Revisions for Draft Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0913	07.01.00.0121	6/22/2010	1	Revisions for Draft Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0914	07.01.00.0122	6/22/2010	1	Revisions for Draft Annual Groundwater Monitoring Report for WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1497	07.01.00.0123	7/8/2011	2	Draft Remedial Action Completion Report - FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0974	07.01.00.0124	7/8/2011	2	Comments on Draft Remedial Action Completion Report for the Former Fire Training Area	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0975	07.01.00.0125	9/28/2011	1	Revised Annual Groundwater Monitoring Report for the Former Fire Training Area	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0976	07.01.00.0126	9/28/2011	1	Revised Annual Groundwater Monitoring Report for the Waste Oil Dump	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0977	07.01.00.0127	10/19/2011	3	Email: Response to Comments for the 2010 WOD Annual Groundwater Monitoring Report	Memo	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	0978	07.01.00.0128	10/19/2011	4	Email: Response to Comments for the 2010 FFTA Annual Groundwater Monitoring Report	Memo	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	0979	07.01.00.0129	10/19/2011	1	Email: Response to Comments for the 2010 WOD Annual Groundwater Monitoring Report	Memo	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0980	07.01.00.0130	10/19/2011	1	Email: Response to Comments for the 2010 FFTA Annual Groundwater Monitoring Report	Memo	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0981	07.01.00.0131	10/19/2011	1	Draft Remedial Action Completion Report for the FFTA	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0982	07.01.00.0132	11/7/2011	1	Email: Response to Comments for the 2010 Annual Groundwater Monitoring Report FFTA	Memo	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0983	07.01.00.0133	11/7/2011	1	Email: Response to Comments for the 2010 WOD Annual Groundwater Monitoring Report	Memo	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0984	07.01.00.0134	11/8/2011	3	Email: Response to Comments for the 2010 FFTA Annual Groundwater Monitoring Report	Memo	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0985	07.01.00.0135	11/21/2011	2	Updated Final Long Term Monitoring Plan for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0986	07.01.00.0136	11/21/2011	2	Updated Final Long Term Monitoring Plan for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0987	07.01.00.0137	11/21/2011	2	Updated Final Long Term Monitoring Plan for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0988	07.01.00.0138	11/21/2011	2	Updated Final Long Term Monitoring Plan for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0989	07.01.00.0139	11/21/2011	2	Updated Final Long Term Monitoring Plan for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0990	07.01.00.0140	11/21/2011	2	Updated Final Long Term Monitoring Plan for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0991	07.01.00.0141	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0992	07.01.00.0142	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0993	07.01.00.0143	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0994	07.01.00.0144	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0995	07.01.00.0145	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0996	07.01.00.0146	11/21/2011	1	2010 Annual Groundwater Monitoring Report for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0997	07.01.00.0147	11/29/2011	1	Final Annual Groundwater Monitoring Report for the Year 2010 WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0998	07.01.00.0148	12/5/2011	4	Email: Response to Comments Draft Remedial Action Completion Report for FFTA	Memo	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0999	07.01.00.0149	12/5/2011	3	Email: Response to Comments Draft Remedial Action Completion Report for FFTA	Memo	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1000	07.01.00.0150	12/12/2011	1	Response to Comments Final Annual Groundwater Monitoring Report for the Year 2010 FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1001	07.01.00.0151	12/13/2011	1	Final Remedial Action Completion Report for WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1002	07.01.00.0152	12/13/2011	1	Final Annual Groundwater Monitoring Report for the Year 2010 WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1003	07.01.00.0153	12/14/2011	1	Final Remedial Action Completion Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1004	07.01.00.0154	12/14/2011	1	Final Remedial Action Completion Report for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1005	07.01.00.0155	12/29/2011	1	Final Remedial Action Completion Report for FFTA	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1046	07.01.00.0156	1/11/2012	1	Requesting VADEQ's concurrence on the Final Construction Completion Report for Site 4, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1047	07.01.00.0157	1/11/2012	1	Awaiting VADEQ's approval of Concurrence for No Further Action Decision on the Final Construction Completion Report for Site 4, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1048	07.01.00.0158	2/28/2012	1	Final Construction Completion Report for Site 4, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1049	07.01.00.0159	2/28/2012	1	Final Construction Completion Report for Site 4, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1050	07.01.00.0160	2/28/2012	1	Final Construction Completion Report for Site 4, NASA Wallops Flight Facility	Letter	4	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1125	07.01.00.0161	10/19/2012	1	EPA reviewed the Letter Work Plan for Monitoring Well Abandonment Activities at the FFTA and WOD sites and has determined that methods proposed to abandon the monitoring wells follows EPA guidance on monitoring well closure and is acceptable, NASA Wallops Flight Facility	email	FFTA and WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1126	07.01.00.0162	10/23/2012	2	Final Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1127	07.01.00.0163	10/23/2012	2	Final Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1128	07.01.00.0164	10/23/2012	2	Final Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1129	07.01.00.0165	12/4/2012	1	VDEQ reviewed the Response to Comments and found them to be acceptable. VDEQ offers no further comment on the Final Letter Work Plan for Monitoring Well Abandonment Activities for FFTA and WOD Sites and considers it to be final, NASA Wallops Flight Facility	Letter	FFTA and WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1130	07.01.00.0166	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the FFTA, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1131	07.01.00.0167	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the FFTA, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1132	07.01.00.0168	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the FFTA, NASA Wallops Flight Facility	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1133	07.01.00.0169	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the WOD Site, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1134	07.01.00.0170	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the WOD Site, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1135	07.01.00.0171	12/13/2012	1	Draft Annual Groundwater Monitoring Report for the Year 2012 for the WOD Site, NASA Wallops Flight Facility	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1136	07.01.00.0172	2/5/2013	1	VDEQ comments on the Annual Groundwater Monitoring Report for 2012 for the FFTA, NASA Wallops Flight Facility	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1137	07.01.00.0173	2/20/2013	1	Well Abandonment Report for FFTA and WOD, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1138	07.01.00.0174	2/20/2013	1	Well Abandonment Report for FFTA and WOD, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1139	07.01.00.0175	2/20/2013	1	Well Abandonment Report for FFTA and WOD, NASA Wallops Flight Facility	Letter	FFTA and WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1154	07.01.00.0176	4/17/2013	1	Information for April 17 Sites 5&12 data call	email	5 & 12	Theodore J. Meyer/NASA	Garth Glenn/TTNUS
2	1155	07.01.00.0177	4/18/2013	1	Information for April 17 Sites 5&12 data call	email	5 & 12	Theodore J. Meyer/NASA	Garth Glenn/TTNUS
2	1301	07.01.00.0178	1/13/2014	1	Draft Remedial Action Completion Report for Sites 5 and 12	Letter	5 & 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1302	07.01.00.0179	1/13/2014	1	Draft Remedial Action Completion Report for Sites 5 and 12	Letter	5 & 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1303	07.01.00.0180	1/13/2014	1	Draft Remedial Action Completion Report for Sites 5 and 12	Letter	5 & 12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1304	07.01.00.0181	3/18/2014	2	Draft Remedial Action Completion Report for Site 5 - Paint Stain and Site 12 - Former Wind Tunnel	Letter	5 & 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1305	07.01.00.0182	5/19/2014	1	Sites 5/12	email	5 & 12	Lisa Denmark/EPA	Theodore J. Meyer/NASA
2	1306	07.01.00.0183	6/3/2014	1	Response to Commnets - Draft Remedial Action Completion Report Site 05 - Paint Stain and Site 12 Former Wind Tunnel	Letter	5 & 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1307	07.01.00.0184	6/2/2014	3	RTCs and Redline Final RACR, Sites 5&12, NASA Wallops	email	5 & 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA, Dawn Fulsher/EPA, Paul Herman/VADEQ
2	1308	07.01.00.0185	6/10/2014	1	Final Remedial Action Completion Report for Sites 5 and 12 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5 & 12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1309	07.01.00.0186	6/10/2014	1	Final Remedial Action Completion Report for Sites 5 and 12 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5 & 12	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1310	07.01.00.0187	6/10/2014	1	Final Remedial Action Completion Report for Sites 5 and 12 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	5 & 12	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1311	07.01.00.0188	6/13/2014	1	NASA Goddard Space Flight Center Wallops Flight Facility Final Remedial Action Completion Report Site 05 - Paint Stain and Site 12 - Former wind Tunnel	Letter	5 & 12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
	1607	07.01.00.0189	8/12/2016	1	Draft Construction Completion Report for the Time-Critical Removal Action for Soil	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1608	07.01.00.0190	8/12/2016	1	Draft Construction Completion Report for the Time-Critical Removal Action for Soil	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1609	07.01.00.0191	8/12/2016	1	Draft Construction Completion Report for the Time-Critical Removal Action for Soil	Letter	NIT	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1610	07.01.00.0192	7/28/2016	1	Final Consensus Document for No Further Action	Letter	NIT	David Liu/NASA	Lorie Baker/EPA
	1611	07.01.00.0193	7/28/2016	1	Final Consensus Document for No Further Action	Letter	NIT	David Liu/NASA	Paul Herman/VADEQ
	1612	07.01.00.0194	7/27/2016	1	Final Construction Completion Report for Time-Critical Removal Action	Letter	AI20	Paul Herman/VADEQ	David Liu/NASA
	1613	07.01.00.0195	7/18/2016	1	WFF NIT Consensus Document RTCs	email	WFF/NIT	Lorie Baker/EPA	David Liu/NASA
	1614	07.01.00.0196	7/14/2016	1	Final Construction Completion Report for AI20	Letter	WFF	David Liu/NASA	Steven Hirsh/EPA
	1615	07.01.00.0197	7/14/2016	1	Final Construction Completion Report for Al20	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1616	07.01.00.0198	7/14/2016	1	Final Construction Completion Report for AI20	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1617	07.01.00.0199	7/14/2016	1	EPA RTCs - NFA Consensus - NITs - Other	email	NIT	David Liu/NASA	Lorie Baker/EPA, Steven Hirsh/EPA, Paul Herman/VADEQ
					07.00 Openalian and Analysia	Data			
	1				07.02 Sampling and Analysis	Data			
					07.03 Scopes of Work				
	1								
	•				07.04 Work Plans and Progressive	e Reports			
2	0724	07.04.00.0001	9/30/2009	385	Final Remedial Action Work Plan, Waste Oil Dump, NASA WFF	WP	WOD	Tetra Tech Nus, Inc.	NASA
2	0725	07.04.00.0002	10/14/2009	168	Final Long Term Monitoring Plan, Waste Oil Dump, NASA WFF	WP	WOD	Tetra Tech Nus, Inc.	NASA
2	1140	07.04.00.0003	10/22/2012	8	Final Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD, NASA WFF	WP	FFTA and WOD	Tetra Tech, Inc.	NASA
2	1156	07.04.00.0004	2/21/2013	1	Deviations to the Sites 5/12 RD/RAWP	email	5&12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1157	07.04.00.0005	2/27/2013	2	Deviation and Addendum to Final RD/RAWP for Sites 5&12	Letter	5&12	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1158	07.04.00.0006	2/27/2013	2	Deviation and Addendum to Final RD/RAWP for Sites 5&12	Letter	5&12	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	1159	07.04.00.0007	2/27/2013	2	Deviation and Addendum to Final RD/RAWP for Sites 5&12	Letter	5&12	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1160	07.04.00.0008	3/7/2013	1	Deviation and Addendum to Final RD/RAWP for Sites 5&12	email	5&12	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1161	07.04.00.0009	3/18/2013	2	Weekly Summary of Field Activities for Sites 5&12	email	5&12	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
					07.05 Cost Reports and Invo	ices			
		<u> </u>			07.06 Interagency and Cooperative	Aareements			
					07.07 ARARs				
					07.08 Remedial Action Docun	nents			
2	0726	07.08.00.0001	7/1/2009	295	Final Pilot Study Report, FFTA, NASA WFF	Report	FFTA	Tetra Tech NUS, Inc.	NASA
2	0916	07.08.00.0002	4/1/2010	317	Final Data Summary Report- Additional Groundwater Investigation Activities - FFTA	Report	FFTA	Tetra Tech NUS, Inc.	NASA
2	0917	07.08.00.0003	8/1/2010	200	Data Summary Report for 6-month post injection sampling at WOD	Report	WOD	Tetra Tech NUS, Inc.	NASA
2	0918	07.08.00.0004	8/1/2010	218	Final Data Summary Report - Former Fire Training Area	Report	FFTA	Tetra Tech NUS, Inc.	NASA
2	0919	07.08.00.0005	12/1/2010	256	Data Summary Report for September 2010 Groundwater Sampling Event - WOD	Report	WOD	Tetra Tech NUS, Inc.	NASA
2	0920	07.08.00.0006	12/1/2010	498	Data Summary Report for September 2010 Groundwater Sampling Event - FFTA	Report	FFTA	Tetra Tech NUS, Inc.	NASA
2	0921	07.08.00.0007	4/1/2011	92	Remedial Action Completion Report for Waste Oil Dump Site	Report	WOD	Tetra Tech NUS, Inc.	NASA
2	0922	07.08.00.0008	6/1/2011	163	Data Summary Report for March 2011 Groundwater Monitoring at FFTA	Report	FFTA	Tetra Tech NUS, Inc.	NASA
2	1006	07.08.00.0009	11/1/2011	168	Updated Long Term Monitoring Plan WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1007	07.08.00.0010	11/1/2011	260	Annual Groundwater Monitoring Report for the Year 2010 for WOD	Report	WOD	Tetra Tech, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1008	07.08.00.0011	11/1/2011	424	Annual Groundwater Monitoring Report for the Year 2010 at FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
2	1009	07.08.00.0012	12/1/2011	22	Remedial Action Completion Report for FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
2	1051	07.08.00.0013	12/28/2011	690	Final Construction Completion Report for Non-Time-Critical Removal Action for Soil for Site 4	Report	4	Tetra Tech, Inc.	NASA
2	1141	07.08.00.0014	2/11/2013	19	Final Well Abandonment Report for FFTA and WOD	Report	FFTA and WOD	Tetra Tech, Inc.	NASA
2	1142	07.08.00.0015	12/20/2012	1	EPA Certification FFTA RACR	Certification Statement	FFTA	EPA	NASA
2	1312	07.08.00.0016	6/5/2014	2	EPA Certification RACT Sites 5 and 12	Certification Statement	5 & 12	EPA	NASA
2	1313	07.08.00.0017	6/10/2014	2966	Final Remedial Action Completion Report Site 5 - Paint Stain and Site 12 - Former Wind Tunnel	Report	5 & 12	Tetra Tech, Inc.	NASA
	-				8.0 Site Closeout				
	1			[	08.01 Correspondence				
2	1052	08.01.00.0001	2/2/2012	1	VDEQ Comments on the Annual Groundwater Monitoring Report for 2011 for the FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1053	08.01.00.0002	2/3/2012	2	VDEQ Comments on the Annual Groundwater Monitoring Report for 2011 for the WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1054	08.01.00.0003	3/20/2012	2	EPA Comments on the Annual Groundwater Monitoring Plan Report for 2011 for the WOD	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1055	08.01.00.0004	5/16/2012	4	NASA's Response to Comments from EPA and VDEQ on the Draft Waste Oil Dump CY 2011 Annual Report	email	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1056	08.01.00.0005	5/18/2012	1	Annual Groundwater Monitoring Report for 2011 for the FFTA, EPA agrees with monitoring well 14-MW004 recommendation and has no further comments to offer at this time	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1057	08.01.00.0006	5/22/2012	2	Revised Draft Final FFTA 2011 Annual Groundwater Report and the DEQ RTCs	email	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ, Steven Hirsh/EPA, Dawn Fulsher/EPA
2	1058	08.01.00.0007	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1059	08.01.00.0008	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1060	08.01.00.0009	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1061	08.01.00.0010	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1062	08.01.00.0011	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1063	08.01.00.0012	5/22/2012	1	Data Summary Report for the March 2012 Groundwater Investigation at the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1064	08.01.00.0013	6/5/2012	1	VDEQ completed review of the RTCs concerning the Draft Annual Groundwater Monitoring Report for the year 2011, FFTA. All responses adequately address VDEQ comments; no further comments offered.	email	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1065	08.01.00.0014	6/18/2012	1	Final Annual Groundwater Monitoring Report for the Year 2011 for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1066	08.01.00.0015	6/18/2012	1	Final Annual Groundwater Monitoring Report for the Year 2011 for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1067	08.01.00.0016	6/18/2012	1	Final 2011 Annual Groundwater Monitoring Report for the FFTA, VDEQ offers no further comments, accepted as Final.	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1068	08.01.00.0017	6/18/2012	1	Response to Comments for Annual Groundwater Monitoring Report for 2011 WOD, the responses adequately address comments submitted, incorporate responses into the final document.	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1069	08.01.00.0018	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1070	08.01.00.0019	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1071	08.01.00.0020	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1072	08.01.00.0021	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1073	08.01.00.0022	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1074	08.01.00.0023	8/2/2012	1	Long Term Monitoring Plan - Rev 1 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1075	08.01.00.0024	8/13/2012	1	EPA has no comments on the Long Term Monitoring Report for the FFTA	email	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1076	08.01.00.0025	8/13/2012	1	EPA comments on the Long Term Monitoring Report for the Draft Soil and Groundwater Sampling and Analysis Plan for SEDA	email	SEDA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1077	08.01.00.0026	8/15/2012	1	Final Annual Groundwater Monitoring Report for the Year 2011 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1078	08.01.00.0027	8/15/2012	1	Final Annual Groundwater Monitoring Report for the Year 2011 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1079	08.01.00.0028	8/15/2012	1	Final Annual Groundwater Monitoring Report for the Year 2011 for the WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1080	08.01.00.0029	8/23/2012	1	VDEQ offers no further comment on the Final Long Term Monitoring Plan Rev. 1 for the FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1081	08.01.00.0030	8/23/2012	1	VDEQ offers no further comment on the Final Long Term Monitoring Plan Rev. 1 for the WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1082	08.01.00.0031	9/14/2012	1	EPA has no comments to offer on the original document or revision of the Long Term Monitoring Report for the FFTA	email	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1083	08.01.00.0032	9/14/2012	1	EPA has no comments to offer on the Long Term Monitoring Report for the WOD	email	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1084	08.01.00.0033	9/18/2012	2	Draft Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites	Letter	FFTA/ WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1085	08.01.00.0034	9/18/2012	2	Draft Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites	Letter	FFTA/ WOD	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1086	08.01.00.0035	9/18/2012	2	Draft Letter Work Plan for Monitoring Well Abandonment Activities at FFTA and WOD Sites	Letter	FFTA/ WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1087	08.01.00.0036	10/3/2012	1	VDEQ comments on the Draft Letter Work Plan for Monitoring Well Abandonment Activities at the FFTA and WOD Sites	email	FFTA/ WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1162	08.01.00.0037	2/25/2013	1	Annual Groundwater Monitoring Report for 2012	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1163	08.01.00.0038	4/18/2013	1	Annual Groundwater Monitoring Report for 2012	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1164	08.01.00.0039	4/18/2013	1	Annual Groundwater Monitoring Report for 2013	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1165	08.01.00.0040	4/24/2013	6	Response to Comments FFTA CY'12 Annual Report	email	FFTA	Theodore J. Meyer/NASA	Garth Glenn/TTNUS
2	1166	08.01.00.0041	4/24/2013	4	Response to Comments WOD CY'12 Annual Report	email	WOD	Theodore J. Meyer/NASA	Garth Glenn/TTNUS
2	1167	08.01.00.0042	5/17/2013	1	Response to Comments WOD CY'2012 Annual Report	Letter	WOD	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1168	08.01.00.0043	5/17/2013	1	Response to Comments FFTA CY'2012 Annual Report	Letter	FFTA	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1169	08.01.00.0044	5/20/2013	2	Response to Comments FFTA CY'2012 Annual Report	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1170	08.01.00.0045	5/20/2013	1	Response to Comments WOD CY'2012 Annual Report	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1171	08.01.00.0046	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1172	08.01.00.0047	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1173	08.01.00.0048	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1174	08.01.00.0049	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1175	08.01.00.0050	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1176	08.01.00.0051	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1177	08.01.00.0052	6/10/2013	1	Final Annual Groundwater Monitoring Report 2012 WOD	Letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1178	08.01.00.0053	7/5/2013	1	Final Annual Groundwater Monitoring Report 2012 FFTA	Letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1179	08.01.00.0054	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for WOD	Letter	WOD	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1180	08.01.00.0055	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for WOD	Letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1181	08.01.00.0056	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for WOD	Letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1182	08.01.00.0057	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1183	08.01.00.0058	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1184	08.01.00.0059	7/11/2013	1	Data Summary Report for March 2013 Groundwater Investigation for FFTA	Letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1185	08.01.00.0060	8/12/2013	4	Draft Five-Year Review	Letter	FFTA/ WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1186	08.01.00.0061	11/1/2013	3	NASA WFF -FiveYear Review Comments	email	FFTA/ WOD	Steven Hirsh/EPA	Garth Glenn/TTNUS
2	1187	08.01.00.0062	11/20/2013		Five-Year Review Response to Comments	email	FFTA/ WOD	Theodore J. Meyer/NASA	Garth Glenn/TTNUS
2	1188	08.01.00.0063	11/22/2013	1	NASA WFF - Response to Comments for the Draft Five-Year Review	email	FFTA/ WOD	Paul Herman/VADEQ	Garth Glenn/TTNUS
2	1224	08.01.00.0064	12/24/2013	1	2013 Annual Groundwater Monitoring Reports	email	FFTA/ WOD	Lisa Johnson/EPA	Paul Herman/VADEQ, Theodore J. Meyer/NASA
2	1225	08.01.00.0065	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the FFTA	letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1226	08.01.00.0066	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the FFTA	letter	FFTA	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1227	08.01.00.0067	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the FFTA	letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1228	08.01.00.0068	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the WOD	letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1229	08.01.00.0069	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the WOD	letter	WOD	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1230	08.01.00.0070	12/13/2013	1	Draft Annual Groundwater Monitoring Report for the Year 2013 for the WOD	letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1231	08.01.00.0071	1/22/2014	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Annual Groundwater Monitoring Report for 2013 Waste Oil Dump	letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1232	08.01.00.0072	1/22/2014	1	NASA Goddard Space Flight Center Wallops Flight Facility Draft Annual Groundwater Monitoring Report for 2013 Former Fire Training Area	letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1233	08.01.00.0073	1/23/2014	1	Draft Annual GW Monitoring Reports for 2013	email	FFTA/ WOD	Lisa Johnson/EPA	Theodore J. Meyer/NASA
2	1234	08.01.00.0143	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1235	08.01.00.0074	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1236	08.01.00.0075	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1237	08.01.00.0076	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1238	08.01.00.0077	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1239	08.01.00.0078	2/12/2014	1	Final Annual Groundwater Monitoring Report for the Year 2013 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1240	08.01.00.0079	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1241	08.01.00.0080	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1242	08.01.00.0081	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1243	08.01.00.0082	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1244	08.01.00.0083	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1245	08.01.00.0084	12/28/2014	1	Long Term Monitoring Plan - Rev 2 for the Waste Oil Dump	letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1246	08.01.00.0085	3/21/2014	1	Final Annual Groundwater Monitoring Report for 2013 Waste Oil Dump	letter	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1247	08.01.00.0086	3/21/2014	1	Final Annual Groundwater Monitoring Report for 2013 Former Fire Training Area	letter	FFTA	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1248	08.01.00.0087	3/24/2014	1	Former Fire Training Area Final Annual Groundwater Monitoring Report	email	FFTA	Lisa Johnson/EPA	Theodore J. Meyer/NASA
2	1249	08.01.00.0088	3/24/2014	1	Waste Oil Dump Final Annual Groundwater Monitoring Report	email	WOD	Lisa Johnson/EPA	Theodore J. Meyer/NASA
2	1250	08.01.00.0089	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1251	08.01.00.0090	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	Theodore J. Meyer/NASA	Lisa Denmark/EPA
2	1252	08.01.00.0091	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1253	08.01.00.0092	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1254	08.01.00.0093	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Lisa Denmark/EPA
2	1255	08.01.00.0094	6/10/2014	1	Data Summary Report for the 2014 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	Theodore J. Meyer/NASA	Paul Herman/VDEQ
2	1256	08.01.00.0095	6/30/2014	1	NASA WFF - Data Summary Report for WOD	email	WOD	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1257	08.01.00.0096	9/15/2014	1	NASA to conduct sampling at FFTA and WOD week of 9/22/14	email	FFTA/ WOD	Steven Hirsh/EPA	David Liu/NASA
2	1258	08.01.00.0097	9/15/2014	1	NASA to conduct sampling at FFTA and WOD week of 9/22/14	email	FFTA/ WOD	Paul Herman/VADEQ	David Liu/NASA
2	1259	08.01.00.0098	10/9/2014	4	FFTA MW053S Tech Memo Oct 9-2014	email	FFTA	David Liu/NASA	Paul Herman/VDEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1260	08.01.00.0099	10/10/2014	1	Damaged Monitoring Well FFTA-MW053S	email	FFTA	Paul Herman/VADEQ	David Liu/NASA
2	1261	08.01.00.0100	10/10/2014	1	Damaged Monitoring Well FFTA-MW053S	email	FFTA	Steven Hirsh/EPA	David Liu/NASA
2	1262	08.01.00.0101	1/21/2015	1	Commnets on FFTA Annual GW Monitoring Report	email	FFTA	Lisa Denmark/EPA	David Liu/NASA
2	1263	08.01.00.0102	1/22/2015	1	Commnets on WOD Annual GW Monitoring Report	email	FFTA	Lisa Denmark/EPA	David Liu/NASA
2	1264	08.01.00.0103	1/13/2015	1	NASA Goddard Space Flight Center, WFF, Draft Annual Groundwater Monitoring Report for 2014 Waste Oil Dump	email	FFTA	Paul Herman/VADEQ	David Liu/NASA
2	1265	08.01.00.0104	12/17/2014	1	NASA Goddard Space Flight Center, WFF, Draft Annual Groundwater Monitoring Report for 2014 Former Fire Training Area	email	FFTA	David Liu/NASA	Paul Herman/VDEQ
2	1266	08.01.00.0105	12/17/2014	1	NASA Goddard Space Flight Center, WFF, Draft Annual Groundwater Monitoring Report for 2014 Former Fire Training Area	email	FFTA	David Liu/NASA	Lisa Denmark/EPA
2	1267	08.01.00.0106	12/17/2014	1	NASA Goddard Space Flight Center, WFF, Draft Annual Groundwater Monitoring Report for 2014 Former Fire Training Area	email	FFTA	David Liu/NASA	Steven Hirsh/EPA
2	1268	08.01.00.0107	12/17/2014	1	Draft Annual Groundwater Monitoring Report for the year 2014 for the waste oil dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	email	FFTA	David Liu/NASA	Paul Herman/VDEQ
2	1269	08.01.00.0108	12/17/2014	1	Draft Annual Groundwater Monitoring Report for the year 2014 for the waste oil dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	email	FFTA	David Liu/NASA	Steven Hirsh/EPA
2	1270	08.01.00.0109	12/17/2014	1	Draft Annual Groundwater Monitoring Report for the year 2014 for the waste oil dump at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	email	FFTA	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1321	08.01.00.0110	12/4/2013	1	NASA FiveYear Review	email	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1322	08.01.00.0111	2/4/2014	1	Final Five-Year Review Report for NASA WFF	letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1323	08.01.00.0112	2/4/2014	1	Final Five-Year Review Report for NASA WFF	letter	WFF	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1324	08.01.00.0113	2/4/2014	1	Final Five-Year Review Report for NASA WFF	letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1325	08.01.00.0114	3/6/2014	2	Comprehensive First Five Year Review, NASA WFF	letter	WFF	Kathyrn Hodgkiss/EPA	William Wrobel/NASA
2	1466	08.01.00.0115	1/21/2015	1	Comments on FFTA Annual GW Monitoring Report	email	FFTA	Lisa Denmark/EPA	David Liu/NASA
2	1467	08.01.00.0116	1/30/2015	2	Annual Groundwater Monitoring Report for 2014 FFTA	letter	FFTA	Paul Herman/VADEQ	David Liu/NASA
2	1468	08.01.00.0117	2/5/2015		WOD 2014 Annual Report VDEQ RTCs	email	WOD	David Liu/NASA	Paul Herman/VADEQ
2	1469	08.01.00.0118	2/5/2015		Comments on Draft WOD Annual Groundwater Report	email	WOD	Lisa Denmark/EPA	David Liu/NASA
2	1470	08.01.00.0119	2/20/2015		NASA WFF - Draft Annual Groundwater Monitoring Report for the Year 2014, Waste Oil Dump	email	WOD	David Liu/NASA	Paul Herman/VADEQ
2	1471	08.01.00.0120	2/20/2015		Comments on FFTA Annual GW Monitoring Report	email	FFTA	David Liu/NASA	Lisa Denmark/EPA
2	1472	08.01.00.0121	2/20/2015		NASA WFF - Draft Annual Groundwater Monitoring Report for the Year 2014, Former Fire Trainng Area	email	FFTA	David Liu/NASA	Paul Herman/VADEQ
2	1473	08.01.00.0122	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Former Fire Trainng Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
2	1474	08.01.00.0123	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Former Fire Trainng Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
2	1475	08.01.00.0124	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Former Fire Trainng Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Lisa Denmark/EPA
2	1476	08.01.00.0125	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
2	1477	08.01.00.0126	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1478	08.01.00.0127	4/21/2015	1	Final Annual Groundwater Monitoring Report for the Year 2014 for the Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Lisa Denmark/EPA
2	1479	08.01.00.0128	5/22/2015	1	Final Annual Groundwater Monitoring Report for 2014 Former Fire Training Area	letter	FFTA	Paul Herman/VADEQ	David Liu/NASA
2	1480	08.01.00.0129	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	David Liu/NASA	Lisa Denmark/EPA
2	1481	08.01.00.0130	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
2	1482	08.01.00.0131	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Former Fire Training Area	letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
2	1483	08.01.00.0132	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Steven Hirsh/EPA
2	1484	08.01.00.0133	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Lisa Denmark/EPA
2	1485	08.01.00.0134	5/27/2015	1	Data Summary Report for the March 2015 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
2	1486	08.01.00.0135	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Former Fire Training Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Lisa Denmark/EPA
2	1487	08.01.00.0136	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Former Fire Training Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
2	1488	08.01.00.0137	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Former Fire Training Area at NASA GSFC WFF	letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
2	1489	08.01.00.0138	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Lisa Denmark/EPA
2	1490	08.01.00.0139	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1491	08.01.00.0140	7/27/2015	1	Draft Long Term Monitoring Plan - Revision 3 for Waste Oil Dump Site at NASA GSFC WFF	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
2	1495	08.01.00.0141	3/11/2015	1	Notification of Field Activities	email	FFTA/ WOD	David Liu/NASA	Steven Hirsh/EPA, Lisa Denmark/EPA, Paul Herman/VADEQ
2	1496	08.01.00.0142	3/11/2015	2	NASA WFF - Drat Annual Groundwater Monitoring Report for the Year 2014, WOD	email	WOD	David Liu/NASA	Lisa Denmark/EPA, Paul Herman/VADEQ
	1560	08.01.00.0143	5/10/2016	1	Final Annual Groundwater Monitoring Report for 2015 - Waste Oil Dump	letter	WOD	Paul Herman/VADEQ	David Liu/NASA
	1561	08.01.00.0144	2/16/2016	1	Data Summary Report for the December 2015 Groundwater Investigation at Former Fire Training Area	letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
	1562	08.01.00.0145	2/16/2016	1	Data Summary Report for the December 2015 Groundwater Investigation at Former Fire Training Area	letter	FFTA	David Liu/NASA	Lorie Baker/EPA
	1563	08.01.00.0146	2/22/2016	1	Draft Annual Groundwater Monitoring Report for 2015 for the Waste Oil Dump	email	WOD	Lorie Baker/EPA	David Liu/NASA
	1564	08.01.00.0147	12/8/2015	1	Draft Annual Groundwater Monitoring Report for the Year 2015 for Waste Oil Dump	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
	1565	08.01.00.0148	12/8/2015	1	Draft Annual Groundwater Monitoring Report for the Year 2015 for the Waste Oil Dump	letter	WOD	David Liu/NASA	Lorie Baker/EPA
	1566	08.01.00.0149	11/13/2015	1	Final Long Term Monitoring Plan - Rev 3 Waste Oil Dump	letter	WOD	Paul Herman/VADEQ	David Liu/NASA
	1567	08.01.00.0150	11/13/2015	1	Final Long Term Monitoring Plan - Rev 3 Former Fire Training Area	letter	FFTA	Paul Herman/VADEQ	David Liu/NASA
	1568	08.01.00.0151	2/1/2016	83	Long Term Monitoring Plan - Rev 3 Response to Comments FFTA and WOD	letter	FFTA/ WOD	David Liu/NASA	Paul Herman/VADEQ
	1569	08.01.00.0152	9/21/2015	1	Final Long Term Monitoring Plan - Rev 3 for Waste Oil Dump	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
	1570	08.01.00.0153	9/21/2015	1	Final Long Term Monitoring Plan - Rev 3 for Waste Oil Dump	letter	WOD	David Liu/NASA	Lisa Denmark/EPA
	1571	08.01.00.0154	9/21/2015	1	Final Long Term Monitoring Plan - Rev 3 for Waste Oil Dump	letter	WOD	David Liu/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1572	08.01.00.0155	9/21/2015	1	Final Long Term Monitoring Plan - Rev 3 for Former Fire Training Area	letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
	1574	08.01.00.0157	9/21/2015	1	Final Long Term Monitoring Plan - Rev 3 for Former Fire Training Area	letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
	1575	08.01.00.0158	9/21/2015	1	Fnal Long Term Monitoring Plan - Rev 3 for Former Fire Training Area	letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
	1586	08.01.00.0159	6/22/2016	1	Data Summary Report for the April 2016 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Steven Hirsh/EPA
	1587	08.01.00.0160	6/22/2016	1	Data Summary Report for the April 2016 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Paul Herman/VADEQ
	1588	08.01.00.0161	6/22/2016	1	Data Summary Report for the April 2016 Groundwater Investigation at the Waste Oil Dump Site	letter	WOD	David Liu/NASA	Lorie Baker/EPA
	1618	08.01.00.0162	8/12/2016	1	Groundwater Investigation for Perfluorinated Compounds	Letter	FFTA	David Liu/NASA	Lorie Baker/EPA
	1619	08.01.00.0163	8/12/2016	1	Groundwater Investigation for Perfluorinated Compounds	Letter	FFTA	David Liu/NASA	Steven Hirsh/EPA
	1620	08.01.00.0164	8/12/2016	1	Groundwater Investigation for Perfluorinated Compounds	Letter	FFTA	David Liu/NASA	Paul Herman/VADEQ
	1621	08.01.00.0165	9/30/2016	1	Draft Work Plan for the PFC Investigaton	Email	FFTA	Lorie Baker/EPA	David Liu/NASA, Paul Herman/VADEQ
	1622	08.01.00.0166	9/14/2016	1	Draft Work Plan for the PFC Investigaton	Letter	FFTA	Paul Herman/VADEQ	David Liu/NASA
	1651	08.01.00.0167	11/10/2016	1	Final Work Plan for the Groundwater Investigation for PFCs	letter	FFTA	Paul Herman/VADEQ	David Liu/NASA
	1652	08.01.00.0168	10/13/2016	5	Draft Work Plan Groundwater Investigation Respnse to Comments	Email	FFTA	David Liu/NASA	Paul Herman/VADEQ, Lorie Baker/EPA, Steve Hirsh/EPA
	1653	08.01.00.0169	1/3/2017	1	Data Summary Report for the December 2016 Groundwater Investigation at Former Fire Training Area	Letter	FFTA	David Liu/NASA	Steve Hirsh/EPA
	1654	08.01.00.0170	1/3/2017	1	Data Summary Report for the December 2016 Groundwater Investigation at Former Fire Training Area	Letter	FFTA	David Liu/NASA	Lorie Baker/EPA
	1655	08.01.00.0171	1/3/2017	1	Data Summary Report for the December 2016 Groundwater Investigation at Former Fire Training Area	Letter	FFTA	David Liu/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1656	08.01.00.0172	1/3/2017	1	Draft Annual Groundwater Monitoring Report FY'16 for the WOD Site	Letter	WOD	David Liu/NASA	Lorie Baker/EPA
	1657	08.01.00.0173	1/3/2017	1	Draft Annual Groundwater Monitoring Report FY'16 for the WOD Site	Letter	WOD	David Liu/NASA	Steve Hirsh/EPA
	1658	08.01.00.0174	1/3/2017	1	Draft Annual Groundwater Monitoring Report FY'16 for the WOD Site	Letter	WOD	David Liu/NASA	Paul Herman/VDEQ
	1659	08.01.00.0175	1/12/2017	1	Data Summary Report - Sept. 2016 Groundwater Monitoring	Letter	FFTA	Lorie Baker/EPA	David Liu/NASA
	1660	08.01.00.0176	1/30/2017	1	Annual Groundwater Monitoring Report 2016	Letter	WOD	Paul Herman/VADEQ	David Liu/NASA
	1661	08.01.00.0177	2/2/2017	1	Draft Annual Groundwater Monitoring Report FY'16 for the WOD Site	Letter	WOD	Lorie Baker/EPA	David Liu/NASA
	1662	08.01.00.0178	2/3/2017	1	Draft Data Summary Report for the 2016Groundwater Investigation	Email	FFTA	David Liu/NASA	Paul Herman/VADEQ, Lorie Baker/EPA, Steve Hirsh/EPA
	1681	08.01.00.0179	11/25/2016	1	Final Annual Groundwater Monitoring Report for the Year 2015 for the Waste Oil Dump Site	Letter	WOD	Lorie Baker/EPA	David Liu/NASA
					08.02 Deletion from National Prio	rities List			
					08.03 Operations and Mainter	ance			
					00.04 Contractor Mark Diana and Dra	waaa Dawart			
2	1088	08.04.00.0001	8/2/2012	168	08.04 Contractor Work Plans and Prog Long Term Monitoring Plan - Rev. 1 for FFTA	Report	s FFTA	Tetra Tech, Inc.	NASA
2	1089	08.04.00.0002	8/2/2012	167	Long Term Monitoring Plan - Rev. 1 for WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1271	08.04.00.0003	2/1/2014	169	Long Term Monitoring Plan - Rev. 2 for WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1272	08.04.00.0004	2/1/2014	188	Long Term Monitoring Plan - Rev. 2 for FFTA	Report	WOD	Tetra Tech, Inc.	NASA
	1556	08.04.00.0005	9/1/2015	85	Long Term Monitoring Plan - Rev 3 for FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
	1557	08.04.00.0006	9/1/2015	83	Long-Term Monitoring Plan - Rev 3 for WOD	Report	WOD	Tetra Tech, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1663	08.04.00.0007	10/1/2016	72	Final Work Plan- Groundwater Investigation for Perfluorinated Compounds	CD	FFTA	Tetra Tech, Inc.	NASA
					08.05 Cost Reports and Invo	ices			
2	1189	08.06.00.0001	6/1/2013		08.06 Long Term Response Data Summary Report for March 2013		FFTA	Totra Toch Inc	NASA
2	1109	08.06.00.0001	0/1/2013		Groundwater Monitoring at FFTA	Report	FFIA	Tetra Tech, Inc.	INASA
2	1190	08.06.00.0002	6/1/2013		Data Summary Report for March 2013 Groundwater Monitoring at WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1273	08.06.00.0003	2/12/2014	297	Final Annual Groundwater Monitoring Report for the Year 2013 for FFTA	Report	WOD	Tetra Tech, Inc.	NASA
2	1274	08.06.00.0004	2/12/2014	171	Final Annual Groundwater Monitoring Report for the Year 2013 for FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
2	1275	08.06.00.0005	6/10/2014	105	Data Summary Report for March 2014 monitoring Activities at FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
2	1276	08.06.00.0006	6/10/2014	59	Data Summary Report for March 2014 monitoring Activities at WOD	Report	FFTA	Tetra Tech, Inc.	NASA
2	1326	08.06.00.0007	1/1/2014	123	Five-Year Review, NASA WFF	Report	WFF	Tetra Tech, Inc.	NASA
2	1382	08.06.00.0008	4/15/2015	276	Final Annual Groundwater Monitoring Report for the Year 2014 for FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
2	1383	08.06.00.0009	4/17/2015	117	Final Annual Groundwater Monitoring Report for the Year 2014 for WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1384	08.06.00.0010	4/16/2015	17	FFTA Monitoring Well MW53S Abandonment, NASA WFF	Report	FFTA	Tetra Tech, Inc.	NASA
2	1385	08.06.00.0011	5/20/2015	56	Data Summary Report for March 2014 monitoring Activities at WOD	Report	WOD	Tetra Tech, Inc.	NASA
2	1386	08.06.00.0012	5/20/2015	82	Final Annual Groundwater Monitoring Report for the Year 2013 for FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
	1558	08.06.00.0013	2/1/2016	83	Data Summary Report for December 2015 Groundwater Monitoring at FFTA	Report	FFTA	Tetra Tech, Inc.	NASA
	1559	08.06.00.0014	4/1/2016	56	Annual Groundwater Monitoring for 2015 at WOD	Report	WOD	Tetra Tech, Inc.	NASA
	1589	08.06.00.0015	6/1/2016	55	Final Data Summary Report for the April 2016 Groundwater Monitoring Activities at WOD	Report	WOD	Tetra Tech, Inc.	NASA
	1623	08.06.00.0016	8/5/2016	14	Final Letter Work Plan for Monitoring Well Installation	Report	FFTA	Tetra Tech, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1664	08.06.00.0017	12/1/2016	85	Data Summary Report September 2016 Groundwater Monitoring	Report	FFTA	Tetra Tech, Inc.	NASA
					9.0 State Coordination	-4 : k	4		
					09.01Correspondence - documents of st	ate involven	ient		
	T		1	09.02 F	ederal Facility/State Contract/State Issue	d Permit i	f applicabl	e	
				0	9.03 State Memoranda of Agreement (SM	OA) if appl	licable		
					10.0 Enforcement 10.01 Correspondence				
					Proposed RCRA Administrative				
1	0198	10.01.00.0001	11/3/2004	2	Agreement on Consent (AAOC) Public Comment	Letter	WFF	Karen Jackson Sismour/VADEQ	James Burke/EPA
1	0207	10.01.00.0002	12/10/2004	18	Administrative Agreement on Consent between EPA and NASA effective December 8, 2004	Letter	WFF	Sue Fields/NASA	Michelle Price-Fay/EPA
1	0208	10.01.00.0003	12/29/2004	2	NASA WFF Field schedule for Site 2, Building E-52 and N-222 Scrapyard Site, January 2005	Letter	2/ N-222	Carolyn Turner/NASA	Project Team
1	0271	10.01.00.0004	2/3/2005	1	Draft 2005 - 2006 Site Management Plan for NASA Wallops Flight Facility	Letter	WFF	Susan Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0272	10.01.00.0005	3/3/2005	2	EPA Comments on the Draft Site Management Plan for Fiscal Years 2005 and 2006	Letter	WFF	Michelle Price-Fay/ EPA	Susan Fields/NASA
1	0273	10.01.00.0006	3/25/2005	1	VADEQ Comments on the Draft Site Management Plan for Fiscal Years 2005 and 2006	Letter	WFF	Paul Herman/VADEQ	Susan Fields/NASA
1	0274	10.01.00.0007	4/14/2005	12	NASA Response to Comments on the Site Management Plan for Fiscal Years 2005 and 2006	Letter	WFF	Susan Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0275	10.01.00.0008	4/14/2005	1	e-mail Acceptance of NASA response to EPA comments on the Site Management Plan	Memo	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0276	10.01.00.0009	4/25/2005	1	email - VADEQ Response to NASA RTC on the Draft Site Management Plan for Fiscal Years 2005 and 2006	Memo	WFF	Paul Herman/VADEQ	Susan Fields/NASA
1	0277	10.01.00.0010	7/26/2005	1	EPA Acceptance on the Final Site Management Plan for Fiscal Years 2005 - 2006	Letter	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0278	10.01.00.0011	8/4/2005	1	EPA Acceptance on the Final Year 2005 Semi-Annual Progress Report	Letter	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0279	10.01.00.0012	11/22/2005	2	Draft 2006 - 2007 Site Management Plan for NASA Wallops Flight Facility	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0312	10.01.00.0013	1/12/2006	1	EPA comments on the draft Site Management Plan for Fiscal Years 2006 and 2007 dated December 2005	Letter	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0313	10.01.00.0014	2/2/2006	1	VADEQ comments on the draft Site Management Plan for Fiscal Years 2006 and 2007 dated December 2005	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0314	10.01.00.0015	3/6/2006	6	NASA Response to Comments on the draft Site Management Plan for Fiscal Years 2006 and 2007 dated December 2005	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0315	10.01.00.0016	3/16/2006	1	email - VADEQ acceptance on the draft Site Management Plan for Fiscal Years 2006 and 2007 dated December 2005	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0316	10.01.00.0017	5/2/2006	1	email - EPA approval of NASA Response to Comments on WFF Site Management Plan for Fiscal Years 2006 and 2007	Letter	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0367	10.01.00.0018	11/30/2006	1	NASA draft SMP for fiscal years 2007 and 2008 for WFF	Letter	WFF	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0368	10.01.00.0019	11/30/2006	1	NASA draft SMP for fiscal years 2007 and 2008 for WFF	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0384	10.01.00.0020	12/22/2006	1	VDEQ comments on NASA WFF Draft Site Management Plan for FY 2007 and 2008	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0388	10.01.00.0021	1/8/2007	1	EPA comments on Site Management Plan, Fiscal years 2007 and 2008.	Letter	WFF	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0392	10.01.00.0022	2/5/2007	4	NASA responses to VDEQ comments on NASA WFF Draft Site Management Plan for FY 2007 and 2008	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0393	10.01.00.0023	2/5/2007	4	NASA responses to VDEQ comments on NASA WFF Draft Site Management Plan for FY 2007 and 2009	Letter	WFF	Carolyn Turner/NASA	Jerry Hoover/EPA
1	0516	10.01.00.0024	3/16/2006	1	email: NASA WFF Site Management Plan o6/07 RTCs	Memo	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA Michelle Price-Fay/ EPA
1	0517	10.01.00.0025	1/8/2007	1	No comments on Site Management Plan for 2007 and 2008	Letter	WFF	Jerry Hoover/EPA	Carolyn Turner/NASA
1	0518	10.01.00.0026	2/28/2007	1	email: NASA Wallops Flight Facility-RTCs for Draft Site Management Plan FY 2007 and 2008	Memo	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0519	10.01.00.0027	3/26/2007	2	Final Site Management Plan for fiscal years 2007 and 2008 and NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Jerry Hoover/EPA Steve Hirsh/EPA
1	0520	10.01.00.0028	3/26/2007	2	Final Site Management Plan for fiscal years 2007 and 2008 and NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0521	10.01.00.0029	4/5/2007	1	email: NASA WFF-Final Site Management Plan for FY 2007 and 2008	Memo	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0522	10.01.00.0030	5/30/2007	1	Fiscal Year 2007 Semi-Annual Progress Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0523	10.01.00.0031	5/30/2007	2	Fiscal Year 2007 Semi-Annual Progress Report for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Steve Hirsh/EPA
1	0524	10.01.00.0032	11/28/2007	1	Draft Site Management Plan for Fiscal years 2008 and 2009 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Steve Hirsh/EPA
1	0525	10.01.00.0033	11/28/2007	1	Draft Site Management Plan for Fiscal years 2008 and 2009 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0526	10.01.00.0034	1/30/2008	1	NASA Goddard Space Flight Center Wallops Flight Facility draft Site Management Plan for FY 2008 and 2009	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
2	0527	10.01.00.0035	4/23/2008	1	email: Actions from April 2008 RPM meeting	Memo	WFF	Dawn Fulsher/EPA	Carolyn Turner/NASA
2	0553	10.01.00.0036	5/29/2008	1	Final Site Management Plan for Fiscal Years 2008 and 2009 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0554	10.01.00.0037	5/29/2008	10	Semi-Annual Progress Report for Fiscal Year 2008 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Steve Hirsh/EPA
2	0555	10.01.00.0038	5/29/2008	10	Semi-Annual Progress Report for Fiscal Year 2008 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ
2	0573	10.01.00.0039	7/8/2008	1	Site Management Plan-Fiscal Years 2008 and 2009	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0653	10.01.00.0040	2/10/2009	1	Draft Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0654	10.01.00.0041	2/17/2009	1	Draft Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0655	10.01.00.0042	3/16/2009	2	Response to Comments for Draft Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J/Meyer/NASA	Paul Herman/VADEQ
2	0656	10.01.00.0043	4/14/2009	1	Final Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0657	10.01.00.0044	4/14/2009	1	Final Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0658	10.01.00.0045	4/20/2009	1	Response to Comment for Draft Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0659	10.01.00.0046	4/24/2009	1	Final Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0728	10.01.00.0047	6/1/2009	1	Semi-Annual Progress Report for Fiscal Year 2009 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0729	10.01.00.0048	6/1/2009	1	Semi-Annual Progress Report for Fiscal Year 2009 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0767	10.01.00.0049	12/1/2009	1	Draft SMP for Fiscal Years 2010 and 2011, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0768	10.01.00.0050	12/1/2009	1	Draft SMP for Fiscal Years 2010 and 2011, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0769	10.01.00.0051	12/1/2009	1	Draft SMP for Fiscal Years 2010 and 2011, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0770	10.01.00.0052	1/11/2010	1	Comments on Draft SMP for FY 2010 and 2011	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0771	10.01.00.0053	2/9/2010	1	Acceptance of Draft SMP for FY 2010 and 2011	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0776	10.01.00.0054	2/12/2010	2	Response to Comments for Site Management Plan for FY 2010 and 2011	email	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0777	10.01.00.0055	2/12/2010	1	Response to Comments for Site Management Plan for FY 2010 and 2012	email	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0923	10.01.00.0056	2/23/2010	1	Final Site Management Plan for Fiscal Years 2010 and 2011, WFF	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0924	10.01.00.0057	2/23/2010	1	Final Site Management Plan for Fiscal Years 2010 and 2011, WFF	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0925	10.01.00.0058	2/23/2010	1	Final Site Management Plan for Fiscal Years 2010 and 2011, WFF	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0926	10.01.00.0059	3/12/2010	1	Final Site Management Plan, Fiscal Year 2010 and 2011	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0927	10.01.00.0060	5/26/2010	1	Semi-Annual Progress Report for Fiscal Year 2010 at NASA	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0928	10.01.00.0061	5/26/2010	1	Semi-Annual Progress Report for Fiscal Year 2010 at NASA	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0929	10.01.00.0062	5/26/2010	1	Semi-Annual Progress Report for Fiscal Year 2010 at NASA	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0930	10.01.00.0063	12/10/2010	1	Draft Site Management Plan for Fiscal Years 2011 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0931	10.01.00.0064	12/10/2010	1	Draft Site Management Plan for Fiscal Years 2011 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0932	10.01.00.0065	12/10/2010	1	Draft Site Management Plan for Fiscal Years 2011 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0933	10.01.00.0066	1/11/2011	1	Draft Site Management Plan for FY2011 and 2012	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0934	10.01.00.0067	2/24/2010	2	Draft Site Management Plan - Fiscal years 2011 and 2012	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	0892	10.01.00.0068	5/23/2011	19	RTC for Draft Site Management Plan for Fiscal Years 2011 and 2012.	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0893	10.01.00.0069	5/23/2011	19	RTC for Draft Site Management Plan for Fiscal Years 2011 and 2012.	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0894	10.01.00.0070	5/23/2011	2	RTC for Draft Site Management Plan for Fiscal Years 2011 and 2012.	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	0935	10.01.00.0071	5/26/2011	1	WFF Site Management Plan	email	WFF	Theodore J. Meyer/NASA	Paul Herman/DEQ, Steven Hirsh/EPA. Dawn Flusher/EPA
2	0936	10.01.00.0072	5/27/2011	1	WFF Site Management Plan	email	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	0937	10.01.00.0073	5/31/2011	1	WFF Site Management Plan	email	WFF	Theodore J. Meyer/NASA	Garth Glenn/ Tetra Tech NUS
2	0938	10.01.00.0074	6/22/2011	19	Final Site Management Plan for Fiscal Years 2011 and 2012, and Fiscal Year 2012 Semi-annual Progress Report	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0939	10.01.00.0075	6/22/2011	1	Final Site Management Plan for Fiscal Years 2011 and 2012, and Fiscal Year 2012 Semi-annual Progress Report	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0940	10.01.00.0076	6/22/2011	1	Final Site Management Plan for Fiscal Years 2011 and 2012, and Fiscal Year 2012 Semi-annual Progress Report	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1010	10.01.00.0077	12/5/2011	1	Draft Site Management Plan for Fiscal Years 2012 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1011	10.01.00.0078	12/5/2011	1	Draft Site Management Plan for Fiscal Years 2012 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1012	10.01.00.0079	12/5/2011	1	Draft Site Management Plan for Fiscal Years 2012 and 2012	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1090	10.01.00.0080	1/31/2012	1	VDEQ Comments on the Draft Site Management Plan for Fiscal Years 2012 and 2013	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1091	10.01.00.0081	4/6/2012	2	RTC for Draft Site Management Plan for Fiscal Years 2012 and 2013	email	WFF	Theodore J. Meyer/NASA	Paul Herman/DEQ, Steven Hirsh/EPA. Dawn Flusher/EPA
2	1092	10.01.00.0082	4/9/2012	1	VDEQ offers no further comment on the Draft Site Management Plan for Fiscal Years 2012 and 2013	email	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1093	10.01.00.0083	4/18/2012	1	Final Site Management Plan for Fiscal Years 2012 and 2013	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1094	10.01.00.0084	4/18/2012	1	Final Site Management Plan for Fiscal Years 2012 and 2013	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1095	10.01.00.0085	4/18/2012	1	Final Site Management Plan for Fiscal Years 2012 and 2013	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1096	10.01.00.0086	4/25/2012	1	EPA agrees that the Final Site Management Plan for Fiscal Years 2012 and 2013 should be considered final.	email	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1097	10.01.00.0087	5/30/2012	1	Semi-Annual Progress Report for Fiscal Year 2012	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1098	10.01.00.0088	5/30/2012	1	Semi-Annual Progress Report for Fiscal Year 2012	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1099	10.01.00.0089	5/30/2012	1	Semi-Annual Progress Report for Fiscal Year 2012	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1100	10.01.00.0090	5/31/2012	1	Responses provided to VDEQ comments have been incorporated. VDEQ offers no further comment and considers the Final Site Management Plan for Fiscal Years 2012 and 2013 to be final.	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1143	10.01.00.0091	12/13/2012	1	Draft Site Management Plan for Fiscal Years 2013 and 2014	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1144	10.01.00.0092	12/13/2012	1	Draft Site Management Plan for Fiscal Years 2013 and 2014	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1145	10.01.00.0093	12/13/2012	1	Draft Site Management Plan for Fiscal Years 2013 and 2014	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1146	10.01.00.0094	2/8/2013	1	VDEQ Comments on the Draft Site Management Plan for Fiscal Years 2013 and 2014	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1191	10.01.00.0095	4/18/2013	1	Draft Site Management Plan FY'2013 2014	Letter	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1192	10.01.00.0096	4/24/2013	1	Response to Comments SMP FY'13-'14	email	WFF	Theodore J. Meyer/NASA	Garth Glenn/ Tetra Tech NUS
2	1193	10.01.00.0097	5/20/2013	1	Response to Comments SMP FY'13-'14	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1194	10.01.00.0098	9/5/2013	1	EPA Comments SMP	email	WFF	Dawn Fulsher/EPA	Theodore J. Meyer/NASA
2	1195	10.01.00.0099	9/17/2013	1	Final SMP FY'2013-2014	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1196	10.01.00.0100	9/17/2013	1	Final SMP FY'2013-2014	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1197	10.01.00.0101	9/17/2013	1	Final SMP FY'2013-2014	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1198	10.01.00.0102	10/2/2013	1	Final SMP FY'2013-2014	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1199	10.01.00.0103	11/13/2013	1	Draft SMP, 60 Day Extension	email	WFF	Theodore J. Meyer/NASA	Garth Glenn/ Tetra Tech NUS
2	1200	10.01.00.0104	11/13/2013	1	Draft SMP, 60 Day Extension	email	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1201	10.01.00.0105	11/13/2013	1	Draft SMP, 60 Day Extension	email	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1327	10.01.00.0106	2/11/2014	1	Draft SMP FY'14-15	email	WFF	Theodore J. Meyer/NASA	Paul Herman/DEQ, Steven Hirsh/EPA, Lisa Johnson/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1328	10.01.00.0107	3/13/2014	1	Draft SMP FY'14-15	email	WFF	Lisa Denmark/EPA	Theodore J. Meyer/NASA
2	1329	10.01.00.0108	3/12/2014	1	Draft SMP FY'14-15	email	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1330	10.01.00.0109	3/19/2014	1	Final SMP for FY' 14-15, GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1331	10.01.00.0110	3/19/2014	1	Final SMP for FY' 14-15, GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1332	10.01.00.0111	3/19/2014	1	Final SMP for FY' 14-15, GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1333	10.01.00.0112	3/21/2014	1	NASA GSFC WFF, Final SMP FY'14-15	Letter	WFF	Paul Herman/VADEQ	Theodore J. Meyer/NASA
2	1334	10.01.00.0113	3/24/2014	1	2014/15 SMP	email	WFF	Lisa Johnson/EPA	Theodore J. Meyer/NASA
2	1335	10.01.00.0114	5/30/2014	3	Semi-Annual Progress Report for FY'2014 at NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Lisa Denmark/EPA
2	1336	10.01.00.0115	5/30/2014	3	Semi-Annual Progress Report for FY'2014 at NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1337	10.01.00.0116	5/30/2014	3	Semi-Annual Progress Report for FY'2014 at NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1338	10.01.00.0117	8/8/2014	1	Notification of Change in RPM, NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Lisa Denmark/EPA
2	1339	10.01.00.0118	8/8/2014	1	Notification of Change in RPM, NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Steven Hirsh/EPA
2	1340	10.01.00.0119	8/8/2014	1	Notification of Change in RPM, NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1341	10.01.00.0120	8/8/2014	1	Notification of Change in RPM, NASA GSFC WFF	Letter	WFF	Theodore J. Meyer/NASA	Lynne Smith/VADEQ
2	1342	10.01.00.0121	12/17/2014	1	Draft SMP for FY'15-16, GSFC WFF	Letter	WFF	David Liu/NASA	Steven Hirsh/EPA
2	1343	10.01.00.0122	12/17/2014	1	Draft SMP for FY'15-16, GSFC WFF	Letter	WFF	David Liu/NASA	Lisa Denmark/EPA
2	1344	10.01.00.0123	12/17/2014	1	Draft SMP for FY'15-16, GSFC WFF	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
2	1355	10.01.00.0124	1/30/2015	1	VADEQ comments - NASA WFF - Draft Site Management Plan FY 2015 and 2016	email	WFF	Paul Herman/VADEQ	David Liu/NASA
2	1356	10.01.00.0125	2/9/2015	2	EPA comments - NASA WFF - Draft Site Management Plan FY 2015 and 2016	email	WFF	Lisa Denmark/EPA	David Liu/NASA
2	1357	10.01.00.0126	2/25/2015	4	NASA response to EPA comments - NASA WFF - Draft Site Management Plan FY 2015 and 2017	email	WFF	David Liu/NASA	Lisa Denmark/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1358	10.01.00.0127	2/25/2015	2	NASA response to VADEQ comments - NASA WFF - Draft Site Management Plan FY 2015 and 2016	email	WFF	David Liu/NASA	Paul Herman/VADEQ
2	1359	10.01.00.0128	6/9/2015	1	NASA WFF - Final Site Management Plan FY 2015 and 2016	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
2	1360	10.01.00.0129	6/9/2015	1	NASA WFF - Final Site Management Plan FY 2015 and 2016	Letter	WFF	David Liu/NASA	Steven Hirsh/EPA
2	1361	10.01.00.0130	6/9/2015	1	NASA WFF - Final Site Management Plan FY 2015 and 2016	Letter	WFF	David Liu/NASA	Lisa Denmark/EPA
2	1364	10.01.00.0131	7/6/2015	1	NASA WFF - Final Site Management Plan FY 2015 and 2016	Letter	WFF	Paul Herman/VADEQ	David Liu/NASA
	1576	10.01.00.0132	5/19/2016	6	NASA response to EPA comments - NASA WFF - Draft Site Management Plan FY 2016 and 2017	email	WFF	David Liu/NASA	Lorie Baker/EPA
	1590	10.01.00.0133	6/22/2016	1	NASA WFF - Final Site Management Plan FY 2016 and 2017	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1591	10.01.00.0134	6/22/2016	1	NASA WFF - Final Site Management Plan FY 2016 and 2017	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1592	10.01.00.0135	6/22/2016	1	NASA WFF - Final Site Management Plan FY 2016 and 2017	Letter	WFF	David Liu/NASA	Steven Hirsh/EPA
	1624	10.01.00.0136	7/5/2016	1	NASA WFF - Final Site Management Plan FY' 2016 and 2017	Letter	WFF	Paul Herman/VADEQ	David Liu/NASA
	1625	10.01.00.0137	5/24/2016	1	NASA WFF - FY' 16-17 Site Management Plan RTCs	Email	WFF	Lorie Baker/EPA	David Liu/NASA
	1665	10.01.00.0138	12/9/2016	1	Draft Site Management Plan for FY'2017 and 2018	Letter	WFF	David Liu/NASA	Lorie Baker/EPA
	1666	10.01.00.0139	12/9/2016	1	Draft Site Management Plan for FY'2017 and 2018	Letter	WFF	David Liu/NASA	Steven Hirsh/EPA
	1667	10.01.00.0140	12/9/2016	1	Draft Site Management Plan for FY'2017 and 2018	Letter	WFF	David Liu/NASA	Paul Herman/VADEQ
	1668	10.01.00.0141	1/24/2017	1	Final Site Management Plan FY'2016 and 2017	Letter	WFF	Lorie Baker/EPA	David Liu/NASA
	1682	10.01.00.0142	11/28/2016	1	Site Management Plan Extension	Email	WFF	Lorie Baker/EPA	David Liu/NASA
					10.02 State Enforcement Rec	ords			
					10.03 Department of Justice (DOJ) - Refe	erral Docume	ents		

DVD	ID No.	EPA AR Category and Document	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.		p					
	T		-	T	10.04 State Negotiations		T	1	
1	0280	10.04.00.0001	11/3/2004	2	VADEQ Comments on the Proposed RCRA Administrative Agreement on Consent (AAC) Public Comment	Letter	WFF	Karen Jackson Sismour/VADEQ	James J. Burke/EPA
					10.05 Federal Facility Negotiations/Site N	lanagement	Plan		
			[						
1	0281	10.05.00.0001	5/12/2005	110	Final Site Management Plan for Fiscal Years 2005 - 2006	Report	WFF	Susan Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0282	10.05.00.0002	5/23/2005	32	Semi-Annual Progress Report for Fiscal Year 2005	Letter	WFF	Susan Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0317	10.05.00.0003	5/19/2006	144	Final Site Management Plan for Fiscal Years 2006 - 2007	Report	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0528	10.05.00.0004	3/1/2007	139	Site Management Plan Fiscal years 2007 and 2008 NASA Wallops Flight Facility Wallops Island, Virginia	Report	WFF	Tetra Tech NUS, Inc.	NASA
1	0529	10.05.00.0005	6/1/2007	26	Fiscal Year 2007 Semi-Annual Progress report for NASA Wallops Flight Facility Wallops Island, Virginia	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0556	10.05.00.0006	5/1/2008	136	Site Management Plan Fiscal Years 2008 and 2009 NASA Wallops Flight Facility Wallops Island, Virginia	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0660	10.05.00.0007	4/24/2009	165	Final Site Management Plan for Fiscal years 2009 and 2010 for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0730	10.05.00.0008	6/1/2009	28	Semi-Annual Progress Report for Fiscal Year 2009 at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0941	10.05.00.0009	2/1/2010	168	Site Management Plan Fiscal Years 2010 and 2011	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0942	10.05.00.0010	5/1/2010	23	Fiscal Year 2010 - Semi-Annual Progress Report for NASA Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0943	10.05.00.0011	6/1/2011	191	Site Management Plan, Fiscal Years 2011 and 2012	Report	WFF	Tetra Tech NUS, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1101	10.05.00.0012	4/18/2012	199	Site Management Plan, Fiscal Years 2012 and 2013	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	1102	10.05.00.0013	5/30/2012	22	Fiscal Year 2012 - Semi-Annual Progress Report for NASA Wallops Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	1202	10.05.00.0014	9/1/2013		Site Management Plan, Fiscal Years 2013 and 2014	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	1351	10.05.00.0015	3/13/2014	243	Site Management Plan, Fiscal Years 2014 and 2015	Report	WFF	Tetra Tech, Inc.	NASA
2	1362	10.05.00.0016	6/9/2015	272	NASA WFF - Final Site Management Plan FY 2015 and 2016	Report	WFF	Tetra Tech, Inc.	NASA
2	1363	10.05.00.0017	6/16/2015	10	Fiscal Year 2015 - Semi-Annual Progress Report for NASA Wallops Flight Facility	Report	WFF	David Liu/NASA	Paul Herman/DEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
	1593	10.05.00.0018	6/1/2016	316	Site Management Plan FY 2016 and 2017	Report	WFF	Tetra Tech, Inc.	NASA
	1594	10.05.00.0019	6/1/2016	8	Semi-Annual Progress Report for FY 2016	Report	WFF	David Liu/NASA	Steven Hirsh/EPA Lorie Baker/EPA
	•				10.06 EPA Administrative O	rder			
1	0175	10.06.00.0001	9/27/2004	57	Administrative Agreement On Consent, National Aeronautics and Space Administration, U.S. EPA Docket No. RCRA-03-2004-0201TH	Report	WFF	James Burke/EPA	Edward Weiler/NASA
1	0283	10.06.00.0002	7/20/2005	1	Notification of Change in NASA Project Coordinator	Letter	WFF	Susan Fields/NASA	Michelle Price-Fay/EPA
1	0369	10.06.00.0003	8/14/2006	1	Notification of Change in EPA Remedial Project Manager	Letter	WFF	Michelle Price- Fay/EPA	Carolyn Turner/NASA
1	0530	10.06.00.0004	3/29/2007	1	Notification of Change in EPA Remedial Project Manager NASA, Goddard Space Flight Center's Wallops Flight Facility (WFF) Wallops Island, Virginia	Letter	WFF	Jerry Hoover/EPA	Carolyn Turner/NASA
2	0557	10.06.00.0005	5/29/2008	54	Notification of Change in Wallops Project Coordinator at NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Steve Hirsh/EPA
2	0772	10.06.00.0006	1/11/2010	1	List of Contractors and Subcontractors per Administrative Agreement on Consent, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0773	10.06.00.0007	1/11/2010	5	List of Contractors and Subcontractors per Administrative Agreement on Consent, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0944	10.06.00.0008	8/4/2011	1	List of Contractors and Subcontractors per Administrative Agreement on Consent, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0945	10.06.00.0009	8/4/2011	5	List of Contractors and Subcontractors per Administrative Agreement on Consent, NASA WFF	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1348	10.06.00.0010	10/2/2014	7	List of Contractors and Subcontractors per Administrative Agreement on Consent, NASA WFF	Letter	WFF	David Liu/NASA	Paul Herman/DEQ, Steven Hirsh/EPA, Lisa Denmark/EPA
2	1349	10.06.00.0011	10/6/2014	1	NASA GSFC WFF List of Contractors and Subcontractors	Letter	WFF	Paul Herman/VADEQ	David Liu/NASA
2	1350	10.06.00.0012	10/7/2014	1	NASA List of Contractors and Subcontractors	email	WFF	Lisa Denmark/EPA	David Liu/NASA
					10.07 EPA Consent Orde	r			
					13.0 Community Relation	e			
		13.01 Co	rresponden	ce - all w	ritten comments from the public includin		a and Fed	leral Agency response	S

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
					13.02 Mailing List				
1	0074	13.02.00.0001	3/1/2003	6	Community Involvement Mailing List, Appendix A	List	WFF	Tetra Tech NUS, Inc.	NASA
1	0387	13.02.00.0002	1/1/2007	9	Addendum to NASA WFF Community Involvement Plan of March 2003	List	WFF	Tetra Tech NUS, Inc.	NASA
	T		1	1	13.03 Technical Review Comr	nittee	1	1	
					13.04 Community Involvemen	t Plan			
	1	[			Community Involvement Plan for NASA		1		
1	0075	13.04.00.0001	3/1/2003	47	Wallops Flight Facility, Wallops Island, Virginia	Plan	WFF	Tetra Tech NUS, Inc.	NASA
							L <u> </u>		
	1	13.0	05 Public Me	etings	transcripts with public comment, attenda	ince list, age	nda, and a	all public meetings	
1	0076	13.05.00.0001	12/28/2002	2	Public Notice for Sites 5/12 RI, Removal Work Plan, Action Memo, and Removal Action	PN	5/12	Gannett Publications	
1	0176	13.05.00.0002	10/6/2004	1	Public Notice dated October 8, 2004	FSh	WFF	NASA, Public Affairs	
1	0177	13.05.00.0003	10/7/2004	1	Public Notice dated October 8, 2004	FSh	WFF	NASA, Public Affairs	
1	0531	13.05.00.0004	2/16/2007	2	Public Notice dated February 14, 2007	PN	WFF	NASA, Public Affairs	
1	0532	13.05.00.0005	3/1/2007	1	Sign-In-Sheet WFF Public Availability Session Waste Oil Dump Site Former Fire Training Area Site Scrapyard Site		WOD, FFTA, N- 222		
2	0946	13.05.00.0006	2/25/2010	4	Certificate for publication of advertisement for Public Notice of Site 4 PRAP	email	Site 4	Gannett Publications	
2	0947	13.05.00.0007	3/17/2010	1	Public Notice of Site 4 PRAP	PN	Site 4	Gannett Publications	
2	0948	13.05.00.0008	3/18/2010	1	Public Notice of Site 4 PRAP	PN	Site 4	Gannett Publications	
2	1203	13.05.00.0009	4/20/2013	1	Public Notice Announces Inititation of Five- Year Review of Remedial Actions	PN	WFF	Eastern Shore News	
2	1204	13.05.00.0010	4/25/2013	1	Public Notice Announces Inititation of Five- Year Review of Remedial Actions	PN	WFF	Chincoteague Beacon	
2	1462	13.05.00.0011	7/30/2015	2	Certification of publication - Public Notice for Al20 Removal Action	PN	AI20	The Daily and Sunday Times	
	1577	13.05.00.0012	3/2/2016	1	Public Notice for Time Critical Removal Action at North Island Transformers	PN	NIT	The Daily Times	

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1578	13.05.00.0013	1/13/2016	2	Certification of publication - Public Notice for Time Critical Removal Action at North Island Transformers	PN	NIT	The Daily and Sunday Times	
	1595	13.05.00.0014	5/25/2016	2	Certification of Publication - Public Notice for Proposed Plans for Project 15 - Active Remediation Projects Sites 14 and 15 - Debris Piles FUDS	PN	WFF	Eastern Shore News	
	•			•	13.06 Fact Sheets				
1	0077	13.06.00.0001	4/1/1991	1	Environmental Fact Sheet, Old Aviation Fuel Tank Farm	FSh	WFF	NASA, Public Affairs	
1	0078	13.06.00.0002	9/1/1991	2	Environmental Insight Fact Sheet, Old Aviation Fuel Tank Farm	FSh	WFF	NASA, Public Affairs	
1	0079	13.06.00.0003	9/1/1992	1	Environmental Insight Fact Sheet, Old Aviation Fuel Tank Farm	FSh	WFF	NASA, Public Affairs	
1	0080	13.06.00.0004	10/1/1993	1	Environmental Insight Fact Sheet, Old Aviation Fuel Tank Farm	FSh	WFF	NASA, Public Affairs	
1	0081	13.06.00.0005	10/1/1994	2	Environmental Insight Fact Sheet, Old Aviation Fuel Tank Farm	FSh	WFF	NASA, Public Affairs	
1	0082	13.06.00.0006	12/1/2002	2	NASA Fact Sheet, NASA's Environmental Restoration Program at Wallops Flight Facility	FSh	WFF	NASA, Public Affairs	
1	0083	13.06.00.0007	6/2002	2	Former Wind Tunnel (Site 12) Contaminated Soil, Fact Sheet	FSh	5/12	NASA, Env. Program	
1	0178	13.06.00.0008	3/1/2004	2	Environmental Fact Sheet, Main Base	FSh	MB	NASA, Public Affairs	
1	0179	13.06.00.0009	10/12/2004	2	Inside Wallops; Volume XX-04; Number 35	FSh	WFF	NASA, Public Affairs	
1	0180	13.06.00.0010	Undated	2	EPA Fact Sheet, WFF	FSh	WFF	EPA	Public
1	0318	13.06.00.0011	Undated	1	NASA Visitor Center Closed to Look for Unexploded Ordnance	Press Release	WFF	NASA, Public Affairs	Public
1	0319	13.06.00.0012	2/1/2006	2	NASA begins cleanup of old ammo Visitor Center closed after bullets unearthed	Press Release	WFF	Stephen Furness/ Eastern Shore News	Public
1	0533	13.06.00.0013	1/1/2006	2	Notice to Wallops Neighbors Fact Sheet	Press Release	WFF	US Army Corp of Engineers	Public
2	0949	13.06.00.0014	3/17/2010	1	Notice of scheduling of public meeting	Press Release	WFF	NASA, Public Affairs	Public
					14.0 Congressional Relatio 14.01 Correspondence if app				
-					14.01 Correspondence If app				
	l	1	1			1			

DVD	ID No.	EPA AR Category and Document	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
		Tracking No.							
					14.02 Transcripts if applic	able			
						L			
				1	14.03 Testimonies if applic	cable			
					14.04 Published Hearing Records	if applicable			
					16.0 Natural Resource Trus 16.01 Correspondence	stee			
1	0084	16.01.00.0001	1/14/2003	5	Natural Resource Trustee Notification	Letter	WFF	Sue Fields/NASA	Robert M. Burr/US DOI
1	0085	16.01.00.0002	1/14/2003	5	Natural Resource Trustee Notification	Letter	WFF	Sue Fields/NASA	Russell Bellmar/NOAA
1	0086	16.01.00.0003	1/14/2003	5	Natural Resource Trustee Notification	Letter	WFF	Sue Fields/NASA	Honorable W. Taylor Murphy, Jr./Secretary Natural Resources, Commonwealth of VA
					16.02 Natural Resource Trustee	Balaasa			
					16.02 Natural Resource Trustee	Release			
				1	16.03 Trustee Notification Form and S	election Guid	le		1
					16.04 Technical Issue Pap	er			
					18.0 Initial Remedial Measures	s (IRM)			<u> </u>
					18.01 Correspondence				
					18.02 IRM Response				
					16.02 IKM Response				
		B		19.0	0 Resource Conservation and Recovery	Act (RCRA) F	Records		·
					19.01 Correspondence				

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0181	19.01.00.0001	9/30/2004	5	Public Notice: Notice of Intent to Issue an Administrative Agreement on Consent Under Section 7003 of the RCRA and the Hazardous Waste and Solid Waste Amendments of 1984	Letter	WFF	Michelle Price-Fay/ EPA	Sherri Potts/ Chincoteague Beacon/Eastern Shores News
					19.02 Notification/Part A/Part B/Pe	rmit Mods			
				[					
					19.03 RCRA Facility Assessment (R	FA) Reports			
1	0087	19.03.00.0001	11/1/1992	147	Draft RFA Report	Report	WFF	Versar, Inc.	

		pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	I I I	1 1	19.04 RCRA Facility Inspection (R	FI) Report			
			19.05 RCRA Enforcement Ac	tion			
		1 1	19.06 Quarterly Enforcement A	Action			
		<u> </u>	19.07 RCRA Corrective Measures S	tudy (CSM)			
				<b>y</b> ( /			
		<u>г т</u>	19.08 RCRA Statement of Ba	asis			
		1 1	19.09 RCRA Corrective Measure Imp	lementation			
	I		19.40 RCRA Facility Inspection (R	FI) Report			
			19.41 Correspondence				
			10.42 Complian and Analysia	Dete			
			19.42 Sampling and Analysis	Data			
		19	9.43 Corrective Action MGMT Plan (CAMF	P)/Site MGMT	Plan		
			40.44 Manle Diama				
			19.44 Work Plans				
			19.45 Interagency/Federal Facility A	greements			
			19.46 ARARs				

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
					19.47 RCRA Facility Investigation (	RFI) Report			
					19.48 Health/Endangerment/Risk As	ssessments			
_				1	19.49 Interim Measures				
	L				19.70 RCRA Corrective Measures S	tudy (CMS)			I
					19.71 Correspondence				
					13.71 Correspondence				
					19.72 Sampling and Analysis	Date			
	1				19.73 Scopes of Work				
					•				
	1				19.74 Work Plan				
					19.75 ARARs Initial Scree	ning			
					19.76 Treatability Studies/Site Char	actorization			
					13.76 Treatability Studies/Sile Char				
					19.77 Corrective Measure Study (C	MS) Report			
					19.78 Proposed Plan for Selected Rei	medial Action	1		
					19.79 RCRA Statement of B	asis			
					19.81 Correspondence				

DVD	ID No.	Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Type	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	L				19.82 Responsiveness Summ	aries			
					-				
					19.83 Scope of Work				
					19.84 Work Plans				
	-				19.85 Interagency or Federal Facility	Agreements	-		
	L				19.86 ARARs				
			_		19.87 Statement of Basis				
	[				19.07 Statement of Basis				
					19.90 RCRA Corrective Measures Imple	mentation (C	;MI)		
					19.91 Correspondence				
					19.92 Sampling and Analysis	Data			
					19.93 Scopes of Work				
					19.94 Work Plans/Progress Re	ports			
					19.95 Cost Reports and Invo	ices			
					10.06 Intergency and Conserting	A area area and a			
					19.96 Interagency and Cooperative	Agreements			

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
					19.97 ARARs				
				[					
	1			19.9	8 Corrective Measure Design/Construction	on & Implem	entation		
					20.0 Other Regulatory				
					20.01 Other Regulatory Correspo	ondence			
1	0182	20.01.00.0001	8/6/2004	1	NASA WFF Transformer Pad X-115A Analytical Results	Memo	X-115A	Sue Fields/NASA	Project Team
1	0183	20.01.00.0002	8/13/2004	1	NASA WFF Former Transformer Pad X- 115A on Wallops Island	Memo	X-115A	Sue Fields/NASA	Project Team
1	0184	20.01.00.0003	9/29/2004	2	Submittal of the Draft Decision Document and TSCA Compliance Report for Sites 7 and 11	Report	7/11	Sue Fields/NASA	Paul Herman/VADEQ; Michelle Price-Fay/EPA
_	r			r	20.02 Regulatory/Consensus Do Toxic Substance Control Act Compliance	cuments	[		
1	0185	20.02.00.0001	9/29/2004	515	Report for Sites 7 and 11, Volumes 1 and 2	Report	7/11	Tetra Tech NUS, Inc.	NASA
1	0534	20.02.00.0002	8/7/2007	2	Draft Work Plan for Toxic Substances Control Act Self-Implementing Remediation for Building X-115 Former Transformer pad at NASA, Goddard Space Flight Center's wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Steve Hirsh/EPA
1	0535	20.02.00.0003	8/7/2007	2	Draft Work Plan for Toxic Substances Control Act Self-Implementing Remediation for Building X-115 Former Transformer pad at NASA, Goddard Space Flight Center's wallops Flight Facility, Wallops Island, Virginia	Letter	5/12	Carolyn Turner/NASA	Paul Herman/VADEQ
1	0536	20.02.00.0004	9/4/2007	2	NASA Goddard Space Flight Center Wallops Flight Facility Draft Work Plan for the NASA TSCA Self-Implementing Remediation Building X-115	Letter	5/12	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0537	20.02.00.0005	9/5/2007	1	email-NASA Wallops - draft Work Plan for the NASA TSCA Self-Implementing Remediation at Bldg X-115	email	5/12	Steve Hirsh/EPA	Carolyn Turner/NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0538	20.02.00.0006	10/5/2007	1	email-Sites 5 and 12 - NASA TSCA Self- Implementing Remediation at Building X- 115	email	5/12	Theodore J. Meyer/NASA	Steve Hirsh/EPA Paul Herman/VADEQ
					21.0 Non-Specific/Oversight Ac	tivities			
					21.01 Non-Specific/Oversight Activities (		nce		
			21.02	2 Remed	ial Project Managers (RPM) Meeting Minu	utes, Handou	ts, and M	aterials	
1	0088	21.02.00.0001	10/23/2001	3	Remedial Project Managers Meeting Summary	Minutes	WFF	Sue Fields/NASA	Project Team
1	0089	21.02.00.0002	1/23/2002	2	Remedial Project Managers Meeting Summary	Minutes	WFF	Sue Fields/NASA	Project Team
1	0090	21.02.00.0003	4/30/2002	1	Remedial Project Managers Meeting Summary	Minutes	WFF	Sue Fields/NASA	Project Team
1	0091	21.02.00.0004	8/19/2002	1	Remedial Project Managers Meeting Summary	Minutes	WFF	Sue Fields/NASA	Project Team
1	0092	21.02.00.0005	12/4/2002	84	Remedial Project Managers Meeting Summary	Minutes	WFF	Sue Fields/Donna Sutherland/NASA	Project Team
1	0093	21.02.00.0006	3/6/2003	23	Final Remedial Project Managers Meeting Summary	Minutes	WFF	Donna Sutherland/NASA	Project Team
1	0096	21.02.00.0007	6/18/2003	7	Remedial Project Managers Meeting Summary	Minutes	WFF	Brenda Harris/Carolyn Turner	Project Team
1	0187	21.02.00.0008	9/25/2003	22	Remedial Project Managers Meeting Summary	Minutes	WFF	Carolyn Turner/ NASA	Project Team
1	0188	21.02.00.0009	2/18/2004	176	Remedial Project Managers Meeting Summary	Minutes	WFF	Carolyn Turner/ NASA	Project Team
1	0199	21.02.00.0010	7/15/2004	32	Remedial Project Managers Meeting Summary	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0284	21.02.00.0011	11/10/2004	22	Remedial Project Managers Meeting Summary - November 2004	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0285	21.02.00.0012	3/7/2005	75	Remedial Project Managers Meeting Summary - March 2005	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0286	21.02.00.0013	6/20/2005	75	Remedial Project Managers Meeting Summary - June 2005	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0320	21.02.00.0014	9/19/2005	72	Remedial Project Managers Meeting Summary - September 2005	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0321	21.02.00.0015	1/24/2006	136	Remedial Project Managers Meeting Summary - January 2006	Minutes	WFF	Carolyn Turner/NASA	Project Team

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0370	21.02.00.0016	5/8/2006	86	Remedial Project Managers Meeting Summary - May 2006	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0539	21.02.00.0017	9/11/2006	194	Remedial Project Managers Meeting Summary - September 2006	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0540	21.02.00.0018	3/1/2007	49	Remedial Project Managers Meeting Summary - March 2007	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0541	21.02.00.0019	7/17/2007	76	Remedial Project Managers Meeting Summary - July 2007	Minutes	WFF	Carolyn Turner/NASA	Project Team
1	0542	21.02.00.0020	11/1/2007	43	Remedial Project Managers Meeting Summary - November 2007	Minutes	WFF	Carolyn Turner/NASA	Project Team
2	0574	21.02.00.0021	3/12/2008	8	Remedial Project Managers Meeting Summary - March 12, 2008	Minutes	WFF	Carolyn Turner/NASA	Project Team
2	0575	21.02.00.0022	4/10/2008	22	Pre Feasibility Study Meeting Summary- April 10, 2008	Minutes	WFF	Carolyn Turner/NASA	Project Team
2	0661	21.02.00.0023	9/15/2008	9	Remedial Project Managers Meeting Summary - September 2008	Minutes	WFF	Carolyn Turner/NASA	Project Team
2	0732	21.02.00.0024	6/5/2008	73	Remedial Project Managers Meeting Summary - June 2008	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0733	21.02.00.0025	12/10/2008	41	Remedial Project Managers Meeting Summary - December 2008	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0734	21.02.00.0026	3/25/2009	85	Remedial Project Managers Meeting Summary - March 2009	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0774	21.02.00.0027	6/16/2009	32	Remedial Project Managers Meeting Summary - June 2009	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0775	21.02.00.0028	9/2/2009	106	Remedial Project Mangers Meeting Summary - September 2009	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0950	21.02.00.0029	3/25/2010	25	Remedial Project Manager's Meeting Agenda and Summary, March 25 and 26 2010	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0951	21.02.00.0030	5/27/2010	2	Meeting Minutes for May 27, 2010 Teleconference on Wallops Island South End Disposal Area	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0952	21.02.00.0031	7/7/2010	14	Remedial Project Manager's Meeting Minutes and Summary, July 7 and 8 2010	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0953	21.02.00.0032	9/15/2010	20	Remedial Project Manager's Meeting Minutes and Summary, September 15 and 16, 2010	Minutes	WFF	Theodore J. Meyer/NASA	Project Team

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0954	21.02.00.0033	12/9/2010	54	Remedial Project Manager's Meeting Minutes and Summary, December 9 and 10, 2010	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0955	21.02.00.0034	12/15/2010	14	Remedial Project Manager's Meeting Minutes and Summary, December 15 and 16, 2010	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	0956	21.02.00.0035	4/6/2011	24	Remedial Project Manager's Meeting Minutes and Summary, April 6 and 7, 2011	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1013	21.02.00.0036	6/22/2011	19	Remedial Project Manager's Meeting Minutes and Summary, June 22, 2011	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1103	21.02.00.0037	8/30/2011	14	Remedial Project Manager's Meeting Minutes and Summary, August 30, 2011	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1104	21.02.00.0038	12/14/2011	40	Remedial Project Manager's Meeting Minutes and Summary, December 14, 2011	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1105	21.02.00.0039	3/22/2012	12	Remedial Project Manager's Meeting Minutes and Summary, March 22, 2012	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1106	21.02.00.0040	6/13/2012	31	Remedial Project Manager's Meeting Minutes and Summary, June 13, 2012	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1147	21.02.00.0041	9/19/2012	30	Remedial Project Manager's Meeting Minutes and Summary, September 19, 2012	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1209	21.02.00.0042	12/19/2012	31	Remedial Project Manager's Meeting Minutes and Summary, December 19, 2012	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1210	21.02.00.0043	4/25/2013	22	Remedial Project Manager's Meeting Summary, April 25, 2013	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1211	21.02.00.0044	6/25/2013	13	Remedial Project Manager's Meeting Summary, June 25, 2013	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1314	21.02.00.0045	11/21/2013	33	Remedial Project Manager's Meeting Summary, November 21, 2013	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1315	21.02.00.0046	2/19/2014	62	Remedial Project Manager's Meeting Summary, February 19-20, 2014	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1316	21.02.00.0047	6/9/2014	28	Remedial Project Manager's Meeting Summary, June 9-10, 2015	Minutes	WFF	Theodore J. Meyer/NASA	Project Team
2	1387	21.02.00.0048	9/30/2014		Remedial Project Manager's Meeting Summary, September30, 2015	Minutes	WFF	David Liu/NASA	Project Team

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
	1579	21.02.00.0049	1/29/2015	34	Remedial Project Manager's Meeting Summary, January 28 - January 29, 2015	Minutes	WFF	David Liu/NASA	Project Team
	1580	21.02.00.0050	5/27/2015	15	Remedial Project Manager's Meeting Summary, May 27, 2015	Minutes	WFF	David Liu/NASA	Project Team
	1581	21.02.00.0051	8/18/2015	73	Remedial Project Manager's Meeting Summary, August 18-19, 2015	Minutes/ Draft Report	WFF	Susan Dunn/NASA	Project Team
	1596	21.02.00.0052	12/8/2015	66	Remedial Project Manager's Meeting Summary, December 8, 2015	Minutes/ Draft Report	WFF	Susan Dunn/NASA	Project Team
	1597	21.02.00.0053	3/22/2016	44	Remedial Project Managers Meeting Summary, Mar 22, 2016	Minutes/ Draft Report	WFF	Susan Dunn/NASA	Project Team
	1669	21.02.00.0054	2/6/2017		Remedial Project Managers Meeting Summary, June 2016	Minutes/ Figures	WFF	Susan Dunn/NASA	Project Team

		EPA AR							
DVD	ID No.	Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
					22.0 General Environmental Resource				
	1		2	22.01 Fa	cility-Wide Environmental Reference Doc	uments Corr	responder	nce	
1	0287	22.01.00.0001	6/8/2005	8	NASA WFF Archive Search Report Preliminary Result and Action for Visitor Center (presentation)	Memo	WFF	Carolyn Turner/NASA	Project Team
1	0322	22.01.00.0002	1/23/2006	1	Final Trip Report for Warning Sign Installation	Letter	WFF	Garth Glenn/TtNUS	Carolyn Turner/NASA
1	0323	22.01.00.0003	3/2/2006	2	email - NASA WFF - Draft Well Inventory Summary Status Report	Letter	WFF	Carolyn Turner/NASA	Garth Glenn/Tetra Tech NUS, Inc.
1	0324	22.01.00.0004	3/2/2006	1	VADEQ comments on the draft Well Inventory Summary Status Report	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0325	22.01.00.0005	4/5/2006	1	EPA comments on the Final Well Inventory Summary Status Report dated January 2006	Letter	WFF	Michelle Price-Fay/ EPA	Carolyn Turner/NASA
1	0326	22.01.00.0006	5/1/2006	17	NASA Response to Comments on the Final Well Inventory Status Report	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA; Lynne Smith/VADEQ
1	0327	22.01.00.0007	5/1/2006	13	NASA WFF Well Inventory Status Report RTCs	Memo	WFF	Carolyn Turner/NASA	Michelle Price-Fay, Paul Herman, Lynne Smith
1	0328	22.01.00.0008	5/5/2006	1	email - VADEQ comments on NASA's Response to Comments on the Final Well Inventory Report	Letter	WFF	Lynne E. Smith/VADEQ	Carolyn Turner/NASA
1	0329	22.01.00.0009	5/12/2006	2	email - VADEQ Response to NASA's Response to Comments on the Final Well Inventory Report	Letter	WFF	Paul Herman/VADEQ	Carolyn Turner/NASA
1	0371	22.01.00.0010	10/13/2006	1	email - NASA WFF Sites 5/12 munitions findings	Letter	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Jerry Hoover/EPA
1	0543	22.01.00.0011	7/30/2007	11	Letter Work Plan for Archive Search Report Identified Sites, NASA Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Steve Hirsh/EPA
1	0544	22.01.00.0012	12/21/2007	8	Formerly Used Defense Site Project Summary Sheets for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Carolyn Turner/NASA	Robert Reali/Norfolk District Corps of Engineers

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	0576	22.01.00.0013	7/3/2008	1	Submittal of Well Abandonment Report, for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0577	22.01.00.0014	7/3/2008	32	Submittal of Well Abandonment Report, for NASA, Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Virginia	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1205	22.01.00.0015	8/22/2013		Site-Specific Safety and Health Plan for Sites 5&12 MEC Surface Survey	Report	5&12	Tetra Tech NUS, Inc.	NASA
2	1206	22.01.00.0016	8/22/2013		Site-Specific Safety and Health Plan for Visitor Center UXO Surface Sweep	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	1207	22.01.00.0017	8/22/2013		Final Work Plan for Sites 5&12 UXO Surface Sweep	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	1208	22.01.00.0018	8/22/2013		Work Plan for Visitor Center UXO Surface Sweep	Report	WFF	Tetra Tech NUS, Inc.	NASA
					22.02 Facility-Wide Environmental Refere		onte		
1	0288	22.02.00.0001	11/1/2003	202	Cultural Resources Assessment	Report	WFF	URS Group, Inc. & EG&G Technical Service Inc.	NASA
1	0289	22.02.00.0002	12/1/2004	319	Final historical Resources Survey and Eligibility Report for Wallops Flight Facility	Report	WFF	URS Group, Inc. & EG&G Technical Service Inc.	NASA
1	0290	22.02.00.0003	1/1/2005	1288	Final Site-Wide Environmental Assessment	Report	WFF	URS Group, Inc. & EG&G Technical Service Inc.	NASA
1	0291	22.02.00.0004	10/20/2005	1206	Archive Search Report for NASA - Wallops Flight Facility, Volumes 1 - 3	Report	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0292	22.02.00.0005	11/22/2005	58	Work Plan for the Explosion Hazard Safety Sign Installation Project	Report	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0293	22.02.00.0006	11/22/2005	72	Health and Safety Plan for the Explosion Hazard Safety Sign Installation Project	Report	WFF	Carolyn Turner/NASA	Paul Herman/VADEQ; Michelle Price-Fay/ EPA
1	0297	22.02.00.0008	12/28/2005	15	Section 106 Compliance for Potential UXO Clearing at the Visitor Center	Letter	WFF	Kent Stover/NASA	Joanna Wilson/Department of Historic Resources

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
1	0330	22.02.00.0009	11/1/2005	2419	Focused Archive Search Report for NASA - WFF Test Cell ( aka Gun Laboratory Range Area) Volumes 1 - 3	Report	WFF	USACE St. Louis	
1	0331	22.02.00.0010	1/1/2006	27	Field Trip Report for Warning Sign Installation at NASA Wallops Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0332	22.02.00.0011	1/18/2006	189	Final Well Inventory Status Summary Report	Report	WFF	Garth Glenn/Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0333	22.02.00.0012	1/20/2006	62	Work Plan for Visitor Center UXO Support	Report	WFF	Garth Glenn/Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0334	22.02.00.0013	1/20/2006	198	Site - Specific Safety and Health Plan for Visitor Center UXO Support	Report	WFF	Garth Glenn/Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0335	22.02.00.0014	5/3/2006	705	Final Visitor Center Unexploded Ordnance (UXO) Clearance Report	Report	WFF	Garth Glenn/Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0372	22.02.00.0015	11/2006	93	Well Abandonment Report	Report	WFF	Garth Glenn/Tetra Tech NUS, Inc.	Carolyn Turner/NASA
1	0545	22.02.00.0016	8/2007	11	Closeout Report Wallops Island Flight Facility DERP FUDS CO3VA0301 Ordnance Disposal Area-D1 Hanger Site Wallops Island, Virginia	Report	13	John F. Regan/USACE	Steve Hirsh/EPA Paul Herman/VADEQ
1	0546	22.02.00.0017	8/2007	72	Work Plan for Sites 005 and 012 UXO Support UXO Surface Sweep/Intrusive Operations	Report	5/12	Tetra Tech NUS, Inc.	NASA
1	0547	22.02.00.0018	8/2007	210	Health and Safety Plan for Sites 005 and 012 UXO Support UXO Surface Sweep/Intrusive Operations	Report	5/12	Tetra Tech NUS, Inc.	NASA
2	0558	22.02.00.0019	5/2008	86	Sampling and Analysis Summary Archive Search Reports National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	NASA
2	0559	22.02.00.0020	6/2008	389	Unexploded Ordnance Clearance Report for Sites 005 and 012 NASA Wallops Flight Facility Wallops Island, Virginia	Report	5/12	Tetra Tech NUS, Inc.	NASA
2	0578	22.02.00.0021	6/2008	32	Well Abandonment Report NASA Wallops Flight Facility National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility	Report	WFF	Tetra Tech NUS, Inc.	NASA

DVD	ID No.	EPA AR Category and Document Tracking No.	Date	No. of pages	Description of Document/Correspondence	Doc. Туре	Site	Author/Author's Affiliation	Recipient/Recipient's Affiliation
2	1212	22.02.00.0022	8/9/2013	27	MEC Surface Clearance Summary Visitor Center and Sites 5&12	Report	WFF	Tetra Tech NUS, Inc.	Theodore J. Meyer/NASA
2	1320	22.02.00.0023	9/1/2014	187	Technical Memoradnum - The Geology/Hydrogeology NASA WFF	Report	WFF	Tetra Tech NUS, Inc.	NASA
					50.0 Administrative Record Oversig				
_				1	50.01 Internal Requests for AR In	nclusion			
					50.02 Repository Correspond	lence			
2	0662	50.02.00.0001	10/31/2008	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0663	50.02.00.0002	10/31/2008	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	0957	50.02.00.0003	6/8/2010	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	0958	50.02.00.0004	6/8/2010	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	0959	50.02.00.0005	6/8/2010	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	1107	50.02.00.0006	3/20/2012	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Dawn Fulsher/EPA
2	1108	50.02.00.0007	3/20/2012	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1109	50.02.00.0008	3/20/2012	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
2	1352	50.02.00.0009	3/19/2014	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Paul Herman/VADEQ
2	1353	50.02.00.0010	3/19/2014	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Lisa Johnson/EPA
2	1354	50.02.00.0011	3/19/2014	1	Administrative Record, NASA Wallops Flight Facility	Letter	WFF	Theodore J. Meyer/NASA	Steve Hirsh/EPA
					50.02 Miccolloncoup Taskaisel O	waraight			
					50.03 Miscellaneous Technical C	versight			
	•								

APPENDIX B

FORMER NAVY SITES FOR REVIEW

Potential Area of Concern/Site	Map Sheet #	USACE PA and PA 2 Documents - Reference/Details <sup>(1)</sup>	USACE SAM - Reference/Details <sup>(2)</sup>	SAM Decision	USACE Project #	USACE Work Plan - Reference/Details <sup>(3)</sup>	Appendix Tab	Screening Notes/Comments	Proposed Action
E-19	15	PA - pg 78, Table 14 - POL			12 (AI-02)	Sampled for gasoline and metals in soil and ground water. No results available.			NFA
E-20	15		#9 Require Further Assessment	NFA					NFA
E-21	15	PA - pg 80, Table 15 POL Non-tank	#12 Corrected to NFA		11 (Al-11)	USACE no investigation, AFTF w/ NASA			NFA
E-22 – Gas Truck Loading Station/Fill Stand	-					-			NFA
	15	PA - pg 80, Table 15 POL Non-tank			11 (AI-30)	USACE no investigation, AFTF w/ NASA			
E-23 – Gas Truck Loading Station/Fill Stand	15	PA - pg 80, Table 15 POL Non-tank			11 (Al-31)	USACE no investigation, AFTF w/ NASA			NFA
E-24/Building 50 – Gasoline Pump and Meter Structure	15	PA - pg 80, Table 15 POL Non-tank			11 (Al-10)	USACE no investigation, AFTF w/ NASA			NFA
E-24 A – Steel Tank Cluster installed in 1943 (A-1 -11,500 Gal tank, A-2 – 15,000 Gal tank, A-3 – 15,000 Gal tank, A-4 – 11,500 Gal Tank, A-5 – 11,500 Gal Tank, and A-6 – 11,500 Gal Tank)	15	PA - pg 78, Table 14 POL							NFA
E-24 B – Unknown Tank	duplicate of	PA - pg 78, Table 14 POL						All of these buildings, tanks, and structures were associated with the former Aviation Fuel Tank Farm (AFTF) and fuel distribution system.	NFA
E-24 c-g	multiple tanks mapped as E- 24A and 50/E- 24/E-60		-	-		-	1	The AFTF was identified as a "Site" under the petroleum storage tank program in 1990 and has been under corrective action overseen by VDEQ since that time. In 1991 NASA closed/removed all tanks, pumps, buildings and associated piping along with 4,700 tons of	NFA
E-25 – Steel 50 E-25-1 – Steel 25,000 Gal Gasoline Storage Tank	15	PA - pg 78, Table 14 POL					1	petroleum contaminated soil. A series of additional remedial actions were conducted through 2010 and the site is currently in a monitoring	NFA
I ank E-26 – Steel 50,000 Gal Gasoline Storage Tank	15	PA - pg 78, Table 14 POL						program administered by VDEQ. Consensus for NFA under	NFA
E-27 – Steel 50,000 Gal Gasoline Storage Tank	15	PA - pg 78, Table 14 POL					1	CERCLA/AAOC was signed in 2004.	NFA
E-32	15		#12, E-32/E-62, Fuel Oil Storage	NFA					NFA
E-62 – Attendant/Storage House E-62-1 – Steel Heating Oil Tank	Duplicate of E-		#12, E-32/E-62 #12, E-32/E-63	NFA NFA					NFA NFA
E-62-2 – Steel Heating Oil Tank	32; changed Bldg number		#12, E-32/E-64	NFA					NFA
	, , , , , , , , , , , , , , , , , , ,		;						
E-36 – Gasoline Issue Point E-54 – Fuel Oil Pump House; Cinder block building	15 15	PA - pg 80, Table 15 POL Non-tank PA - pg 80, Table 15 POL Non-tank			 11 (Al-34)	 USACE no investigation, AFTF w/ NASA			NFA NFA
E-55 – Steel 42,000 Gal Gasoline Storage Tank.	15	PA - pg 78, Table 14 POL							NFA
E-59 – Pump House	15		#12 Oil storage, above ground pumping station	NFA					NFA
E-60 – Manifold House	15		#12 Above ground pumping station	NFA					NFA
E-65 – Pump House	15								NFA
E-77 – Fill Stand E-77-A – Tank Cluster (E-77-A-1 – Steel 10,000 Gal Jet Fuel	15								NFA
Tank; E-77-A-2 – Steel; 10,000 Gal Jet Fuel Tank)	15								NFA
E-77-B – Heating Oil Tank D-12 - Pump House, S.D.P. Number 2	15								NFA
D-12 H Sewage Disposal D-12A - Sewage Treatment Plant Biofilter D-12A H Part of Sewage System D12-B - Sewage Treatment Plant Communitor D12-B H Part of Sewage System D-12C - Sewage Treatment Plant Primary Sediment Tank D-12C - Sewage Treatment Plant Primary Sediment Tank D-12C + Part of Sewage System D-12D + Part of Sewage System D-12E H Part of Sewage System D-12E + Sewage Treatment Plant Sludge Digestion D-12E + Sewage Treatment Plant Sludge Digestion D-12E + Sewage Treatment Plant Sludge Digestion D-12F - Sewage Treatment Plant Sludge Digestion D-12F + Part of Sewage System D-12F + Part of Sewage System D-12G - Sewage Treatment Plant Secondary Sedimentation D-12G H Part of Sewage System D-121 - Sewage Treatment Plant Chlorine Reaction Basin D-121 + Part of Sewage System D-121 - Sewage Treatment Plant Concrete Block Outfall D-121 H Part of Sewage System D-12J + Sewage Treatment Plant Chlorine Reaction and Contact D-12J H Part of Sewage System	2	PA - pgs 100-101 (Table 27 Sewage Treatment), 120, 124- 125 (Table 31), and 140-141 (Table 38)					2	All of these structures/buildings were associated with the former Waste Water Treatment Plant (WWTP). In 1995, VDEQ issued a RCRA Compliance Order requiring closure of the WWTP drying beds due to the placement of regulated sludge from the former metal plating shop. The sludge and bed material were removed and a series of soil and groundwater investigations were conducted at the WWTP. In 2001 VDEQ issued a letter stating that soil and groundwater did not pose a risk to potential residential users. In 2002, VDEQ issued a letter confirming that no further closure or monitoring were required and closed the Compliance Order. In 2006, a study confirmed that mercury seals were not used/present in the trickling filter rotary arms. The WWTP was taken out of service in 2000. The sludge drying beds were used until 2014. The WWTP and drying beds building/structures were demolished and removed in	
D-96 - Sewage Plant (rotary biofilter) D-96 H Part of Sewage System		PA - pgs 101 (Table 27 Sewage Treatment),120, 125 (Table 31) and 141 (Table 38)						drying beds building/structures were demolished and removed in 2014. The "head works" remain in place and act as a transfer station	NFA
D-97 - Sewage Treatment Plant Primary Sedimentation Tank D-		31), and 141 (Table 38) PA - pgs 101 (Table 27 Sewage Treatment),120, 125 (Table						for the current WWTP.	NFA
97 H Part of Sewage System D-98 - Sewage Treatment Plant Sludge Drying Bed		31), and 141 (Table 38)							
D-98 H Part of Sewage System D-98A - Sewage Treatment Plant Sludge Drying Bed D-98A H Part of Sewage System		PA - pgs 101 (Table 27 Sewage Treatment),120, 125 (Table 31), and 141 (Table 38)							NFA
D-99 - Sewage Treatment Plant Sludge Digester D-99 H Part of Sewage System		PA - pgs 101 (Table 27 Sewage Treatment),120, 125 (Table 31), and 141 (Table 38)							NFA
D-100 - Sewage Treatment Plant Secondary Sedimentation		PA - pgs 101 (Table 27 Sewage Treatment),120, 125 (Table				-	1		NFA
D-100 H Part of Sewage System		31), and 141 (Table 38)				WP 2012: DCPa detected in 2 of 4			
E-1 – Electrical Substation Transformer Bank	14	PA - pg 96, Table 23 Transformer Banks (removed)		-	12 (AI-6)	WP 2012: PCBs detected in 3 of 4 soil samples (180 µg/kg - surface and 6.5 µg/kg subsurface). ND in GW WP Add.: Proposes additional sampling and provides WP results. WP Add. results not available.	3	A 2009 NASA investigation detected PCBs in 2 of 4 samples with maximum concentration of 950 µg/kg. Consensus for NFA under CERCLA/AAOC was signed in June 2009. A 2012 USACE investigation detected PCB maximum concentration of 180 µg/kg in surface soil, 6.5 µg/kg in subsurface soil and non-detect in GW.	NFA

Potential Area of Concern/Site	Map Sheet #	USACE PA and PA 2 Documents - Reference/Details <sup>(1)</sup>	USACE SAM - Reference/Details <sup>(2)</sup>	SAM Decision	USACE Project #	USACE Work Plan - Reference/Details <sup>(3)</sup>	Appendix Tab	Screening Notes/Comments	Proposed Action
N-133 – Filling Station/Current Credit Union	18	PA - pg 78, Table 14 POL	-				4	NASA Site 8/former gas station. In 1990, the gas station tanks were closed under the VDEQ petroleum storage tank program and the tanks, piping, dispensers were removed. Soil sampling conducted in 1990 and 2000 confirmed the lack of a release and VDEQ confirmed closure. Consensus for NFA under CERCLA/AAOC was signed in 2004.	NFA
D-8 – Boiler House	8	PA2 - pgs 126-128, 151, 161 (Sampling needed)	#11, Ash/Soot (non-haz) local landfill, blowdown water discharged to WWTP, heavy oil (bunker C) and coal used for fuel	Further Assessment	17	No WP	5	The boiler/heating plant was taken out of service in 2011. During operations boiler ash was containerized and disposed offsite and blowdown water was treated through the WWTP. Historic petroleum releases associated with Building D-8 operations have been investigated and/or remediated. Petroleum storage tanks for the boiler and other building operations have been closed under the VDEQ petroleum program. The tanks and related piping have been removed and a series of site characterization studies, including soil and groundwater sampling, confirmed no significant release or risk. No concerns with D-8 activities impacting environment have been identified.	NFA
H-30 – Four Car Garage	3	PA2 - pgs 71-74, 79, 159, 162, 172 Potential HTRW	#8; No HTRW. Fluids from parked cars may have dripped on the concrete slab. Recommended for further assessment.	Further Assessment	17	No WP	6	H-30 is a two-story structure. The first floor is a four car garage which has been used by Navy and NASA staff to store and perform light maintenance on private vehicles. The upstairs houses the staff morale association. There is no evidence that hazardous materials or substances have ben released to the environment from activities at H 30.	NFA
C-15 – Fire House	9	PA2 - pgs 99, 101, 102, 123, 160, 163, 172 Potential HTRW	#9; Only permanent fire house identified in Navy facility plans. May have been used to store chemicals and maintain extinguishers. Due to lack of information recommended for further assessment.	Further Assessment	17	No WP	7	C-15 served as a Fire House up to 1961. NASA uses C-15 for storage and offices space . There is no evidence to indicate that hazardous materials or substances were stored or used in the building. USACE site investigation groundwater samples collected immediately down gradient indicate no release of hazardous substances related to activities at Building C-15.	NFA
J-219 – Small Craft Overhaul Shop J-219E – Maintenance and Repair	11	PA - pg 82 Table 17 and page 118 and page 140; No Specific information is available about J-219. PA discusses "typical" maintenance activities that may have occurred at a list of multiple buildings. Interviews with former Navy servicemen disclosed that TCE, PCE, and carbon tetrachloride. were used at the base for cleaning engine and electrical parts (in general not J-219 specific). Potential HTRW site; potential discharge to sanitary sewer.			17	No WP	8	J-219 was used by DOD for one year. The structure is located adjacent to the boat basin and has an open bay door facing the bulkhead/dock. It is assumed that small water craft were maintained in the building. There are no indications that hazardous materials have been released from the building to the environment. NASA does not use the building for any official purpose and it is currently used by tenants to store fishing supplies.	
E-134 – Squad Line Shop	17	PA2 - pgs 55, 68-70, 159, 161, 171. Identified as a an Electronic Storage and Aircraft Underwater Weapons electronic shop. Flight line minor repairs, cleaning and preventive maintenance may have occurred. NASA used for office and radar spare part storage. Possible HTRW site.	#7, Aircraft Underwater Weapons/mobile radar shop; No specific information regarding activities during DOD use. Potential use of solvents and other HTRW for cleaning electronics equipment.	Further Assessment	11 (Al-60)	Soil and groundwater samples collected around the perimeter of E-134. The samples were analyzed for VOCs and metals. Acetone, toluene, xylenes, and metals were detected at low concentrations (below RSLs).	9	E-134 has been used for activities related to electronic and mobile radar tracking component storage and maintenance. There is no evidence that hazardous substances were stored at E-134. USACE soil and groundwater samples collected around the perimeter of E- 134 indicate there has been not been a release related E-134 activities.	NFA
F-139 – Paint Locker	4	PA2 - pgs 93-96, 98, 160, 162, 163, 171. No specific information available. Small building/locker adjacent to or attached to F-20 used to store paint. Building no longer exists. Potential HTRW.	#12, Potential stored paint and solvents; building is gone; no evidence or staining in former building location (area currently paved).	Further Assessment	11 (Al-80)	Soil and groundwater samples collected and analyzed for VOCs and metals. Low concentrations of chromium, lead and zinc were detected in soil. Trace concentrations of acetone and toluene were detected in soil and groundwater.		F-20, F-21, and F-139 were utilized as storage and various	NFA
F-21 – Quonset Storage/Carpenter and Material Shop	4	PA2 - pgs 99, 107-110, 123, 160, 163, 172. Carpenters shop used for aircraft modification R&D and test shop. Potential HTRW site. Building demolished and new building constructed by NASA in 1990.	#1, DOD activities unknown, may have included use of glues, paints, solvents; building has been demolished and new building constructed in footprint.	Further Assessment	WP 11 and WP 11 Add. (Al-82)	Soil and groundwater samples collected and analyzed for VOCs and metals. Low concentrations of chromium, lead and zinc were detected in soil. Trace concentrations of acetone, toluene, ethylbenzene were detected in soil and/or groundwater. Naphthalene was detected in one groundwater sample at 0.22 µg/L above the EPA RSL.	10	workshops until they were demolished and a new building and roadways/parking lots constructed in the same location. USACE soil and groundwater investigations conducted around F-20, F-21 and F- 139 in which sampleswere analyzed for select metals and VOCs. There were no exceedances of EPA RSLs in soil. In groundwater naphthalene was detected above the EPA tapwater RSL. Based on the analytical results there is no evidence that a CERCLA release related to F-20, F-21, or F-139 activities.	NFA
F-20 – Quonset Storage/Ordnance shop/Stores	4	PA2 - pgs 83, 90-92, 96, 162. Used as an "ordnance quality shop" and storage of guided missile electronic parts and equipment. Potential HTRW site from cleaning. Build has been demolished and a new building constructed on footprint.	#1, DOD activities other than storage unknown; potential cleaning, painting and maintenance; possible HTRW. Building has been demolished and NASA constructed new building on footprint.	Further Assessment	17	No WP			NFA
F-18 – Transformer Bank	13	PA - pg 96, Table 23 Transformer Banks at Building F-18. May have contained PCBs. Transformer bank removed.			WP 12 and WP 12 Add. (Al-19)	WP: AI-19: No surface soil detections of PCBs; Subsurface soil sample (20 feet bgs) PCBs at 35 µg/kg. WP Add: AI-19 No further investigation required/planned	11	F-18 was an Outdoor Electrical Substation that existed from 1946 to the early 1990s and likely used transformers containing PCBs. The USACE collected soil and groundwater samples which were analyzed for PCBs. PCBs were detected in only one soil sample at 35 µg/kg. PCBs were not detected in groundwater. The results indicate that a release of PCBs has not occurred.	NFA
B-129 – Aircraft Fire and Crash Building B-129B – Offices and Fire Trucks	10	PA - pgs 102, 125, 140 (Tables 28, 31, 38) DOD activities at these buildings are unknown. Potential HTRW.			17	No WP	12	B-129 has served as the Aircraft Fire and Crash Building/ Firefighting House since 1955. Based on the historical and current use of B-129 along with the soil and groundwater samples collected in proximity of B-129 it is unlikely that a significant release has occurred in the area.	
F-10A – Paint Locker (ORD), Tool and Storage	12	PA - pg 81, Tables 16, 31 and 38. Paint locker, tool and storage. Building removed. Potential HTRW.			17	No WP		F-10A and F-10B have been used for multiple purposes including a paint locker, equipment storage, workshops, and flammable storage since 1947. Specific information on the activities or chemicals used is	Further Action

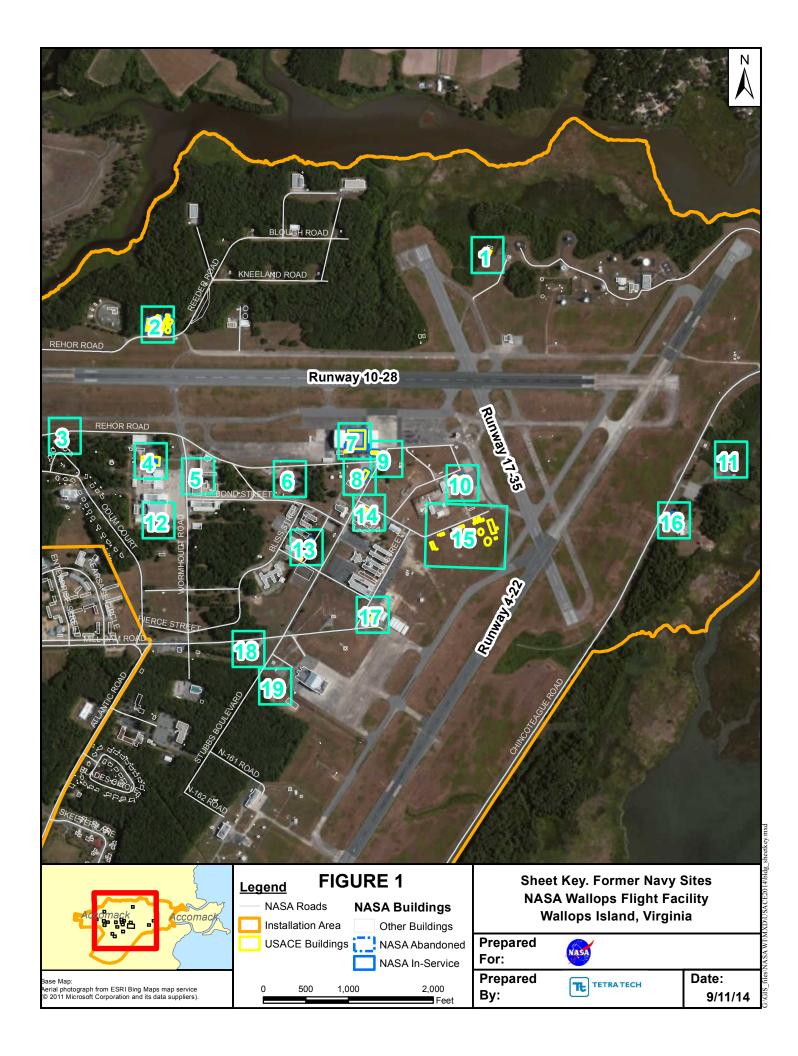
Potential Area of Concern/Site	Map Sheet #	USACE PA and PA 2 Documents - Reference/Details <sup>(1)</sup>	USACE SAM - Reference/Details <sup>(2)</sup>	SAM Decision	USACE Project #	USACE Work Plan - Reference/Details <sup>(3)</sup>	Appendix Tab	Screening Notes/Comments	Proposed Action
F-10B – Battery Shop (ORD), Heat Treating Shop F-10B J Batteries Storage	12	PA - pg 82, Tables 17, 31 and 38. Minimal potential for HTRW release due to operations and compounds used.			17	No WP	13	not available. There have been no environmental investigations conducted at F-10A or F-10B. It is recommended that a screening level focused sampling investigation be conducted to determine if a release has occurred and if further CERCLA actions are warranted.	Further Action
J-12 – Transformer	16	PA 2 - pg 3, 134-136, 163, 164. Transformer bank removed. Footprint covered by NASA Visitors Center, walkway and over 3 feet of fill material.	#13: Support structure was removed by NASA 1980-81; Footprint covered by Visitor's Center and walkway. No evidence of a release; referred to Project 8 due to concerns regarding potential PCBs in shallow groundwater affecting municipal water wells.	Further Assessment	8 (AI-9)	Temporary MW installed and sampled; no soil samples due to location under building; No PCBs detected in ground water.	14	J-12 served as a transformer bank from 1948 through 1980. There is no documentation or any indication that a release has occurred at J- 12. The site's original surface soil was covered by the Visitor Center and 1 to 3 feet of fill.	s - NFA r
D-137 – Water Treatment Pump House D-137A – Water Treatment Pump House	6	PA - pgs 102, 121 and Tables 28, 31 and 38. Pump may have contained a mercury seal and if leaked would have discharged mercury to drinking water. Low risk of release to environment. Building removed.	Used to add lime and aerate drinking water and expose	NFA for D-137A	17	No WP	15	D-137A served as a water treatment pump house and water purification plant since 1955 for the drinking water system . D-137A was removed sometime between 1980 and 2007. Building D-137 was a water treatment pump house but is currently used for storage of pumps and other equipment. There are no know environmental concerns at D-137 or D-137A based on their previous and current use. It is unlikely that D-137 or D-137A is a potential source of a CERCLA release.	n NFA
N-166 – Alcohol Storage Bldg. N-166	19	PA2 - pgs 93, 96-98, 160, 162, 163, 173. Building used to store alcohols and glycols for deicing planes. May have also stored small amounts of explosives (type unknown). NASA used for office supply and records storage.		Further	17	No WP		<ul> <li>N-166 is a one story building which was used for explosive packaging and temporary storage and storage of alcohol. N-166 has not been specifically investigated but nearby samples show that a significant release has not occurred in the area. Sampling and analysis did not include explosives.</li> <li>N-218 was used as a Flammables Storehouse and Calibration Lab Support building. N-218 does not currently exist at its previous</li> </ul>	t
N-218 – Flammables Storehouse	19	PA - pg 86, Table 19 Identified as a Calibration Lab Support as part of the aircraft maintenance grouping. No specific information regarding N-218 or the operations; as part of aircraft maintenance potential HTRW.			11 (Al-46)	Originally used as storage locker for aircraft maintenance operations. Installed soil boring and temporary MW. Sampled for select metals, VOCs, and naphthalene. Low metals In soil and ND in GW. Trace acetone and toluene in soil and GW. All results well below RSLs.	16 t	The USACE investigated N-218 by collecting soil and groundwater samples and analyzing them for metals, VOCs, and PCBs. Only low concentrations of a few VOCs and metals were detected in the samples. The results of these samples and the available documents indicate that a significan release has not occurred in the area.	/ NFA
F-36 – Generator House/Storage	13	PA - pgs 80 (Table 15), 117, 122 (Table 31), and 136 (Table 35). No specific information regarding F-36 or the operations. Labled a POL Non-Tank site because of the gasoline used for the generators. Currently used for storage			11 WP and 11 WP Add. (AI-35)	Soil and groundwater samples collected and analyzed for VOCs and lead. Low concentrations of lead and toluene were detected in soil. Trace concentrations of toluene were detected in groundwater.	17	The USACE investigated F-36 by collecting soil and groundwater samples and analyzing them for lead and select VOCs. Only low concentrations were detected in the samples. The sample results of these samples and the available documents indicate that a significan release has not occurred in the area.	
F-44 – Compressor Building	5	PA - pgs 80 (Table 15), 117, 122 (Table 31), and 136 (Table 35). No specific information regarding F-44 or the operations. Labled a POL Non-Tank site because of the storage of paint. Currently used as storage facility.			11 (Al-36)	Soil and groundwater samples collected and analyzed for VOCs and metals. Low concentrations of metals, acetone, and toluene were detected in soil. Trace concentrations of sinc and toluene were detected in groundwater.	18	The USACE investigated F-44 by collecting soil and groundwater samples and analyzing them for metals and VOCs. Only low concentrations were detected in the samples. The sample results of these samples and the available documents indicate that a significan release has not occurred in the area.	
D-101– Electronics and Maintenance Shop	9	PA - pgs 95 (Table 22), 119, 123 (Table 31), and 140 (Table 38). No specific information regarding D-101 or the operations. Identified an an area where COPCs could have been used. Currently used for office space.	_				19	Based on the historical and current use of D-101 it is unlikely that D- 101 is a potential source of a CERCLA release. Groundwater samples collected to the north of D-101 indicate a release has occurred at AI-14. Further investigation will be required at AI-14 to define the extent of contamination, but will be separate from D-101	- NFA

(1) PA: Defense Environmental Restoration Program for Formerly Used Defense Sites Preliminary Assessment Wallops Flight Facility Accomack County, Virginia Property Number - C03VA0301; US Army Corps of Engineers; Spetmeber 2011.

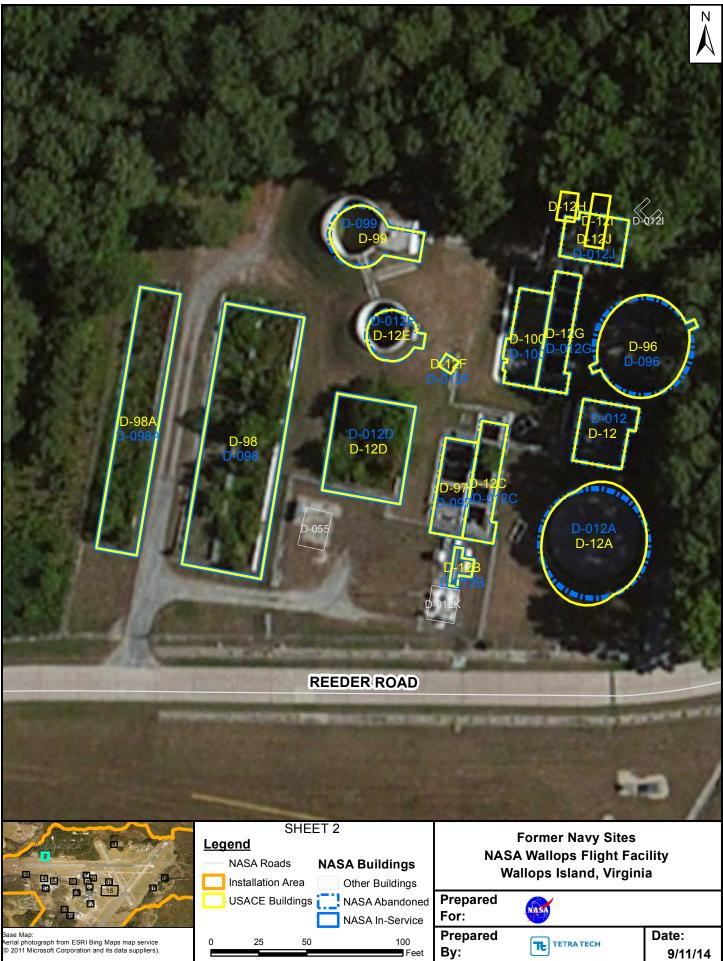
PA2: Defense Environmental Restoration Program for Formerly Used Defense Sites Preliminary Assessment II Wallops Flight Facility Accomack County, Virginia Property Number - C03VA0301; US Army Corps of Engineers; June 2013.

PA2: Defense Environmental Restoration Program for Formerly Used Defense Sites Preliminary Assessment II Wallops Flight
(2) Wallops Flight Facility Partners Main Base Final Site Assessment Memo #1; US Army Corps of Engineers; March 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #2; US Army Corps of Engineers; June 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #3; US Army Corps of Engineers; December 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #3; US Army Corps of Engineers; December 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #3; US Army Corps of Engineers; October 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #6; US Army Corps of Engineers; October 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #6; US Army Corps of Engineers; October 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #7; US Army Corps of Engineers; Cotober 2010.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #7; US Army Corps of Engineers; February 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #8; US Army Corps of Engineers; February 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #9; US Army Corps of Engineers; February 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #10; US Army Corps of Engineers; June 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #11; US Army Corps of Engineers; June 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #12; US Army Corps of Engineers; June 2011.
Wallops Flight Facility Partners Main Base Final Site Assessment Memo #12; US Army Corps of Engineers; June 2011.
Wallops Flight Facility Partners Main

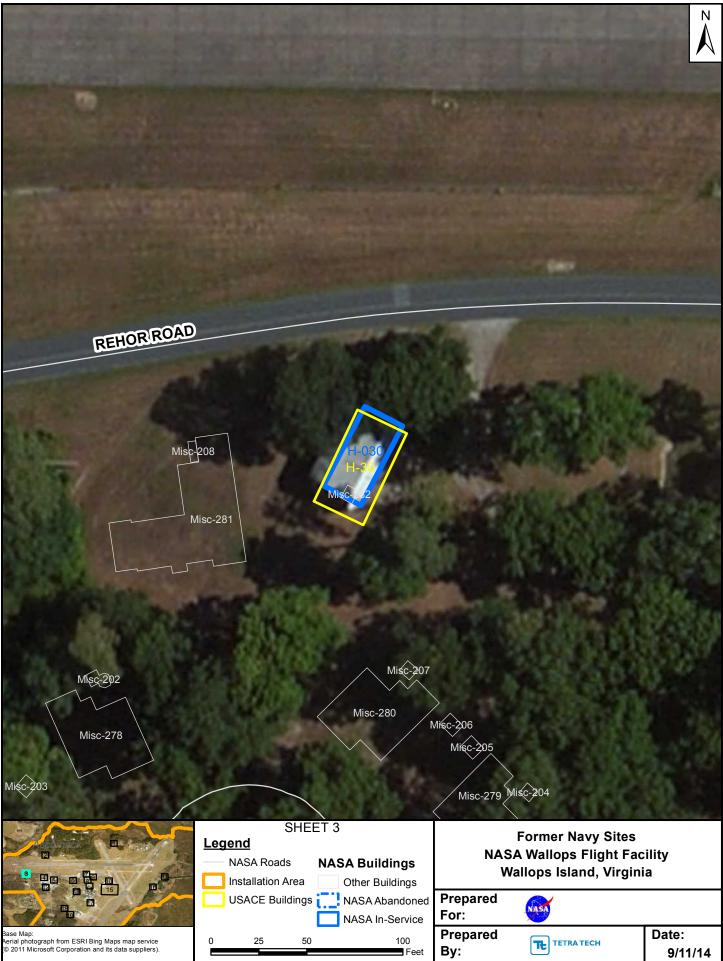
(3) Site Inspection Work Plan Project 11 – Main Base HTRW Areas of Interest Wallops Flight Facility, Virginia; Weston; July 2012 Final POL Storage and Distribution Investigation Work Plan, Project 12 – CON/HTRW-POL Storage and Distribution Wallops Flight Facility, Accomack County, Virginia; Watermark; April 2012. Draft Final POL Storage and Distribution Site Inspection Work Plan Addendum, Project 12 – CON/HTRW-POL Storage and Distribution Wallops Flight Facility, Accomack County, Virginia; Watermark; April 2012. Draft Final POL Storage and Distribution Site Inspection Work Plan Addendum, Project 12 – CON/HTRW-POL Storage and Distribution Wallops Flight Facility, Accomack County, Virginia; Watermark; January2013. Final Site Inspection Work Plan Addendum #2 Project 11 – Main Base HTRW Areas of Interest Wallops Flight Facility, Virginia; US Army Corps of Engineers; January 2014 Site Investigation Report Site Investigation Report of Project 08 HTRW – Boat Basin Area NASA Goddard Space Flight Center Wallops Flight Facility Wallops Island, Virginia; Versar; July 2012.



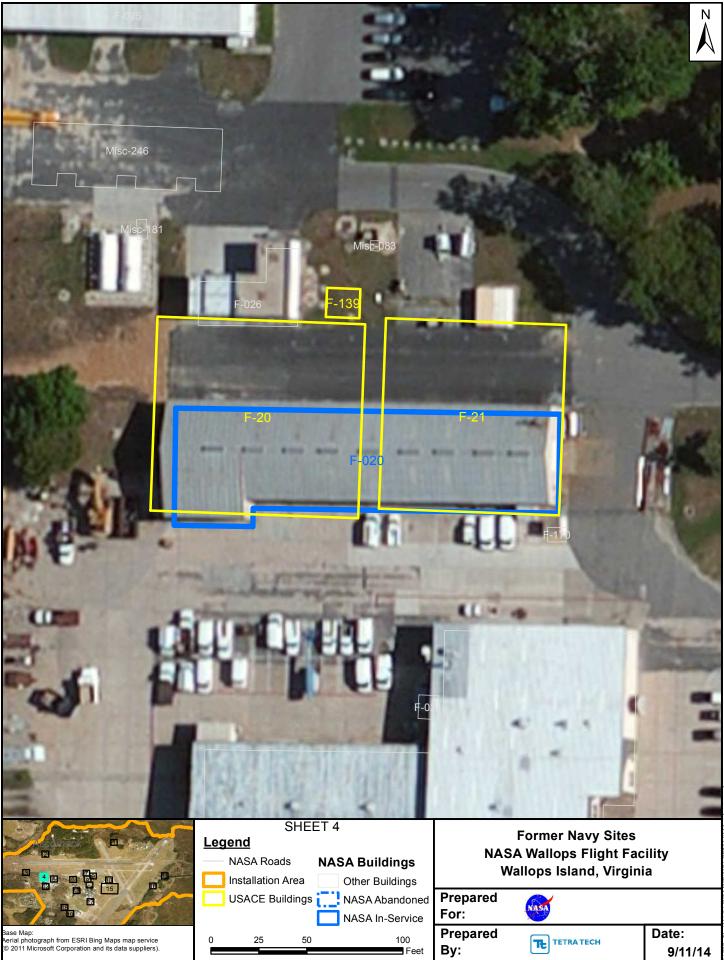




S\_files/NASAWI/MXD/USACE2014/bldg\_sheets.i



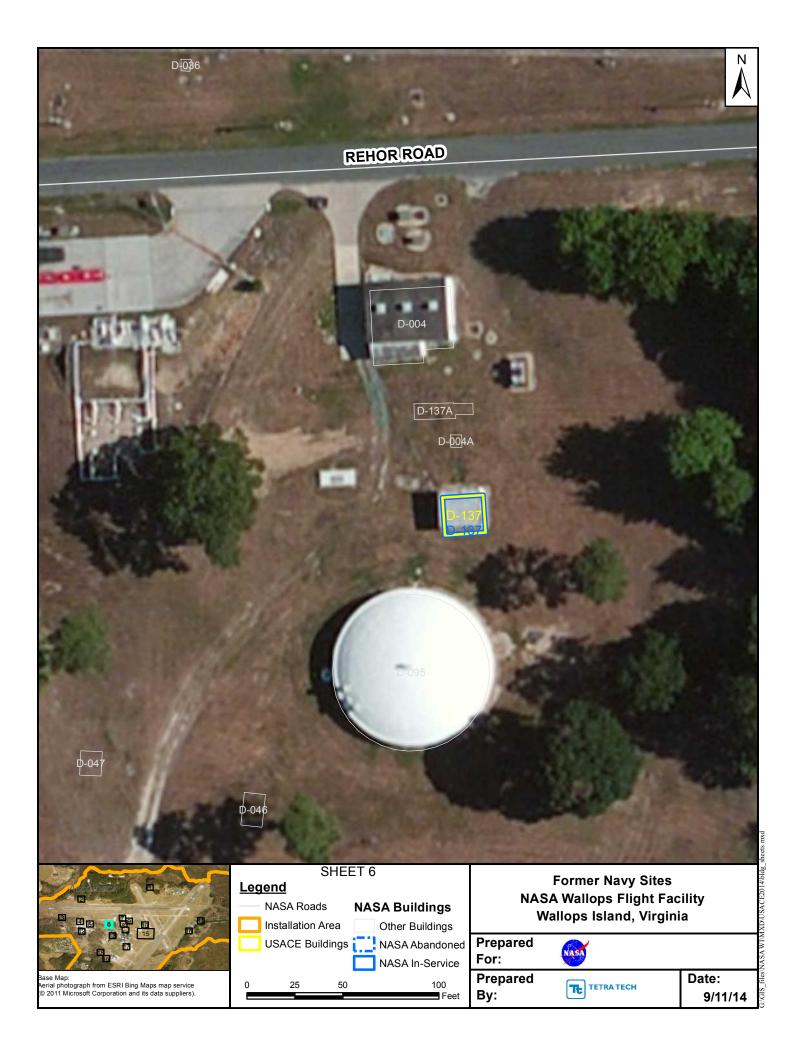
Files/NASA WI/MXD/USACE2014/bldg sheet

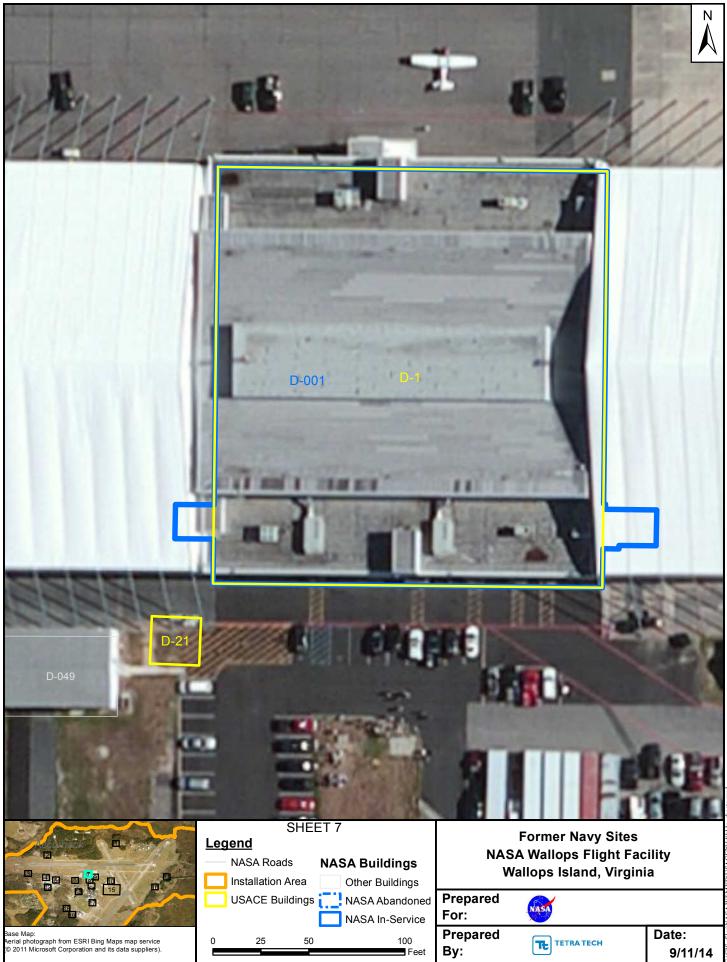


files/NASA WI\MXD\USACE2014\bldg\_shee



files/NASA WI/MXD/USACE2014/bld



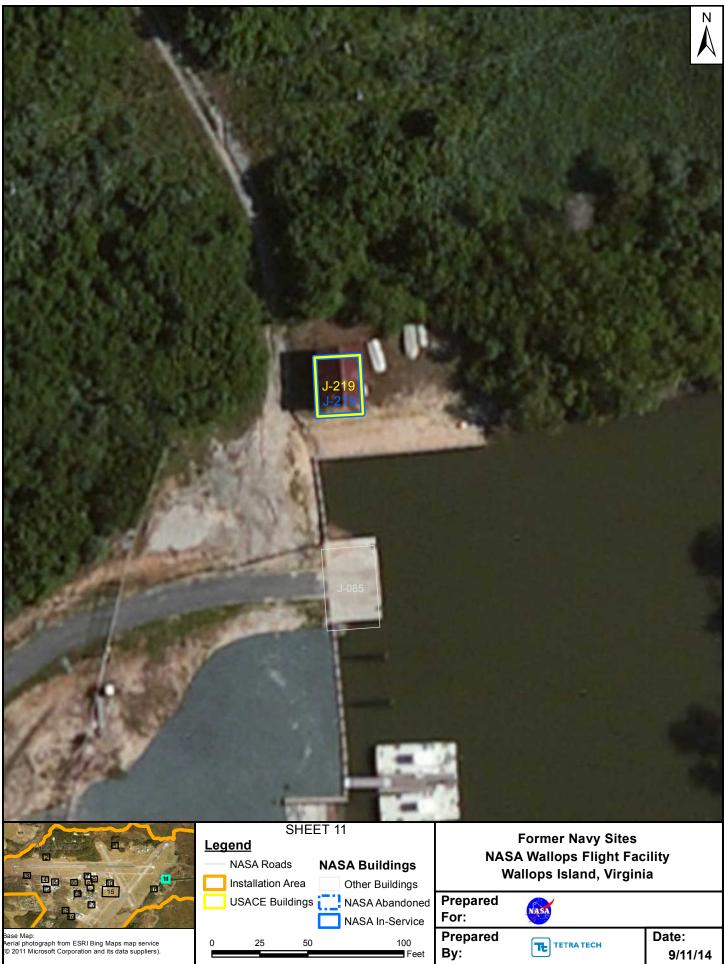




files\NASAWI\MXD\USACE2014\bldg\_sheet







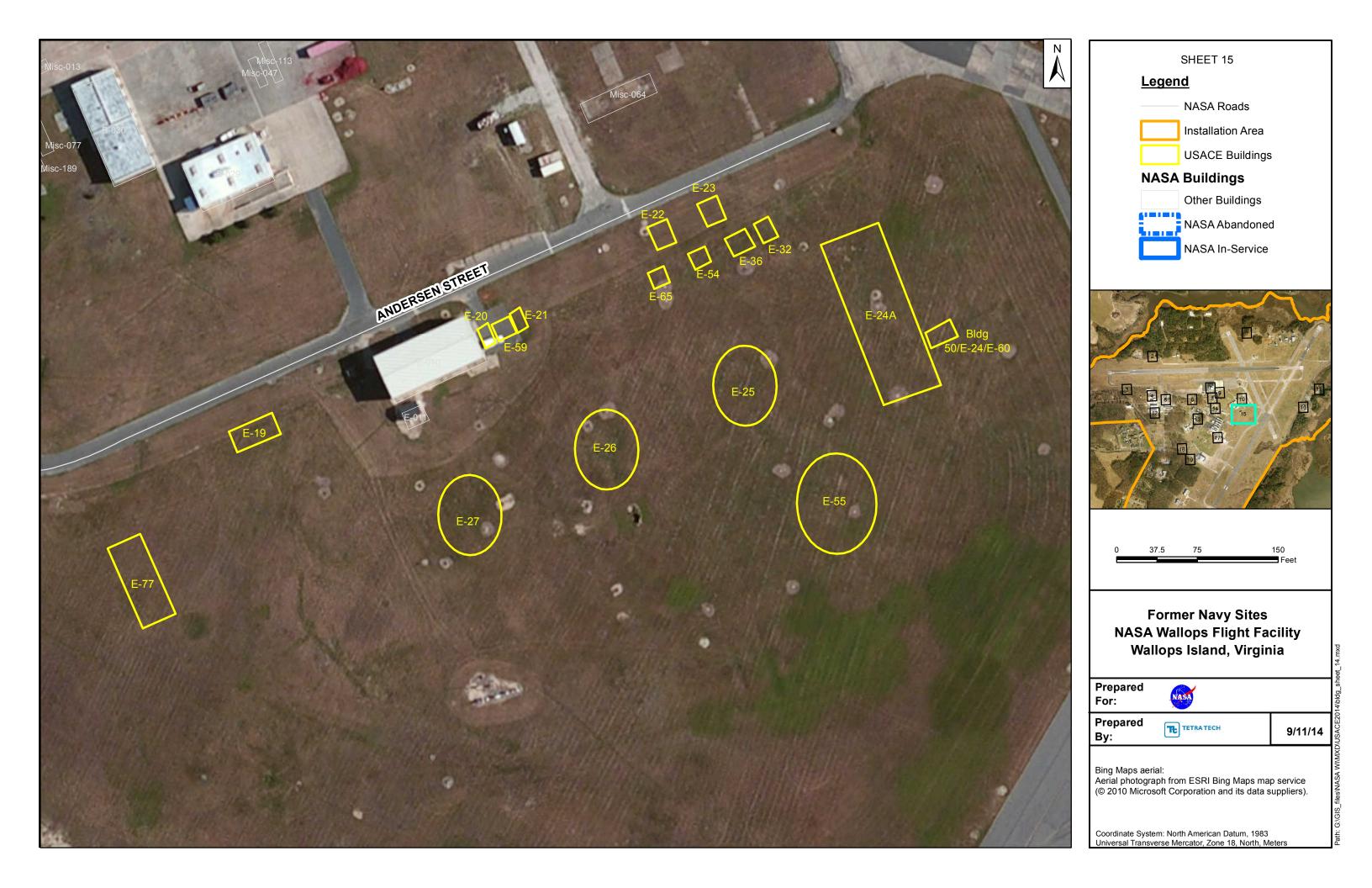
IS\_files/NASAWI\MXD\USACE2014\bldg\_sheets.





files/NASA WI/MXD/USACE2014/bldg\_shee









Tiles/NASA WI\MXD\USACE2014\bldg\_sheets



S\_files/NASA WI/MXD/USACE2014/bldg\_sheets.i



APPENDIX C

NASA WFF FUDS SITES

	NASA WFF FUDS SITES <sup>(1)</sup>						
USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility					
USACE Project 03 – MMRP (Gunboat Point, Strafing Target, Ammunition Disposal Area, and Target Center located on northern portion of WI)	<u>Gunboat Point</u>						
	Strafing Target						
	Ammunition Disposal Area (also referred to as the EOD Area)						
	Target Center						
USACE Project 04 – MMRP (Machine Gun and Rocket Firing Area located on northeastern portion of WI)	Machine Gun and Rocket Firing Area						
USACE Project 05 – MMRP (Grebe Range and Explosive Ammunition Test Facility located on central to northern portion of WI)	<u>Grebe Range – Building W-42 – Concrete Slab 20-mm Gun</u>	FUDS responsible for MEC and any non-transformer issues; NASA responsible for transformers.					
	<u> Grebe Range – Building W-44 – Control Shack</u>	FUDS responsible for MEC and any non-transformer issues; NASA responsible for transformers;					
	<u>Grebe Range – Building W-45 – Mk 37 Equipment Hut</u>	FUDS responsible for MEC and any non-transformer issues; NASA responsible for transformers;					
	<u>Grebe Range – Building W-46 – Mk 37 Grebe Range</u>	FUDS responsible for MEC and any non-transformer issues; NASA responsible for transformers;					
	Explosive Ammunition Test Facility – Building W-81 – Explosive Ammunition Test Facility						
	Explosive Ammunition Test Facility – Building W-140 – Environmental Test Chamber						
	Explosive Ammunition Test Facility – Rocket Cluster Site						

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
USACE Project 06 - HTRW (WI NAOTS Cantonment Area located on northern WI)	Wallops NAOTS Cantonment Area (AI-1)	FUDS - Anticipated NFA after current phase is completed
	Building W-13 – Carpenter Shop	
	Building W-23 – Saw Filing Shop	FUDS - Anticipated NFA after current phase is completed
	Building W-34 – Paint Shop	
	Building W-35 – Paint Storage	FUDS - Anticipated NFA after current phase is completed
	Building W-47- M37 Generator House	FUDS - Anticipated NFA after current phase is completed
	Building W-63 – Gasoline Storage Tank and W-64 – Fuel Oil Storage Tanks	FUDS - Anticipated NFA after current phase is completed
	Building W-65 – Battery Charging Shop	
	Building W-66 – Plumbing Shop	FUDS - Anticipated NFA after current phase is completed
	Building W-69 – Range Storage #1	FUDS - Anticipated NFA after current phase is completed
	Building W-69A – Range Storage #2	FUDS - Anticipated NFA after current phase is completed
	Building W-39 – NAN Battery Shed	FUDS - Anticipated NFA after current phase is completed

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
USACE SMP Project 07 – MMRP (Boat Basin et al. located on eastern portion of MB)	Gun Butts No. 1 (J-18) and 2 (J-130)	
	Pyrotechnics Dump	
	South Bank of Boat Basin	
USACE SMP Project 08 – HTRW (Boat Basin et al. located on eastern portion of MB)	Building J-1 – Storehouse	FUDS - Anticipated NFA after current phase is completed
	Building J-3 – Bos'n Locker Battery Locker	FUDS - Anticipated NFA after current phase is completed
	Building J-4 – Head (also known as Bathroom)	FUDS - Anticipated NFA after current phase is completed
	Building J-5 – Battery Shop (Boat)	FUDS - Anticipated NFA after current phase is completed
	Building J-6 – Paint Locker	FUDS - Anticipated NFA after current phase is completed
	Building J-7 – Carpenter Shop	FUDS - Anticipated NFA after current phase is completed
	Building J-13 – Machine Shop	FUDS - Anticipated NFA after current phase is completed
	Building J-14 – Storehouse	FUDS - Anticipated NFA after current phase is completed
	Septic Tank in Between J-1 and J-5	FUDS - Anticipated NFA after current phase is completed
USACE SMP Project 09 – MMRP (Main Base Range – Skeet Range located on north central portion of MB)	Building A-26A and A-26B	
	Building A-28 – Tower Trap House	
	Building A-37 – Control and Storage	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
USACE SMP Project 11 – HTRW (Main Base Areas of Interest located throughout MB)	PROJECT 11 GROUNDWATER WITHIN PROJECT 11 AREA	To Be Determined
	Building D-1 – Hangar	FUDS - Anticipated NFA after current phase is completed
	Building D-9 – Laundry and Dry-Cleaning Plant	FUDS - Anticipated NFA after current phase is completed
	Building D-21 – Battery Shop	
	Building D-22 – Gun Cleaning Shop	
	Building D-23 – CASU Paint Shop	FUDS - Anticipated NFA after current phase is completed
	Building D-24 – Rocket Assembly Hut	FUDS - Anticipated NFA after current phase is completed
	Building D-25 – Battery Shop	
	Building 9/B-5 – Hangar	FUDS - Anticipated NFA after current phase is completed
	Building 37/B-2 – Hangar	
	Building 58/B-14 – Hangar	FUDS - Anticipated NFA after current phase is completed
	Building 52/A-7 Auxiliary Power Station	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	Building A-45A – Aircraft Maintenance	
	Building B-16 – HEDRON Metal and Carpenter Shop	FUDS - Anticipated NFA after current phase is completed
	Building B-22 – Ground School Navigation Point	
	Building B-23 – PWD Paint Shop	FUDS - Anticipated NFA after current phase is completed
	Building 8B/B-24 – PWD Joiner Shop	
	Buildings B-26, B-28, and B-29 – Paint Storage	FUDS - Anticipated NFA after current phase is completed
	Building B-2A – Flammable Storage	
	Buildings B-47 and B-48 – Flammable Storage	
	Building B-53 – Flammable Storage	
	Buildings B-62 and B-63 – Flammable Storage	
	Building B-34 – Auto Body and Paint Shop/Fire House	FUDS - Anticipated NFA after current phase is completed
	Building B-37 – Paint Storage	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	Building B-41 – Paint Storage	FUDS - Anticipated NFA after current phase is completed
	Building B-42 – P.W. Plumbing and Sheet Metal Shop	
	Building E-6 – Garbage House	
	Building A-43 – Catapult	FUDS - Anticipated NFA after current phase is completed
	Building F-12 – Head/Trailer Park Laundry	FUDS - Anticipated NFA after current phase is completed
	Building F-22 – Photographic Laboratory	
	Building F-28 – Battery Locker	FUDS - Anticipated NFA after current phase is completed
	Building F-32 – Laundry and Heads	
	Building G-59 – Laundry	FUDS - Anticipated NFA after current phase is completed
	Building H-22 – Laundry and Storage	FUDS - Anticipated NFA after current phase is completed
	Buildings D-19 and D-20 – CASU Line Shack	
	<u>Building D-42 – Line Shack</u> – built by the Navy in 1947 (WFF-2957-23). Removed by the Navy circa 1950 (WFF-2957-23). No NACA/NASA use identified.	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	Buildings A-30 and A-31 – Line Shacks	FUDS - Anticipated NFA after current phase is completed
	Buildings A-34A and A-45 – Aircraft Operations Line Shacks	
	Building N-163 – Line Shack	FUDS - Anticipated NFA after current phase is completed
	Building N-164 – Line Shack	FUDS - Anticipated NFA after current phase is completed
	Building D-30 – Drone Engineering	FUDS - Anticipated NFA after current phase is completed
	Building 10/B-27 – Ambulance and Truck Garage	
	Building A-32 – Ordnance Shack	FUDS - Anticipated NFA after current phase is completed
	Building D-29 – Ordnance Shack	FUDS - Anticipated NFA after current phase is completed
	Building F-19 – Quonset Storage	
	Building M-15 – Ordnance Shack	FUDS - Anticipated NFA after current phase is completed
	Building N-116 – Ordnance Shop	
	Building D-28 – Carpenter Shop	FUDS - Anticipated NFA after current phase is completed

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	Building B-155 – Carpenter Shop	FUDS - Anticipated NFA after current phase is completed
	Building E-53 – Electric and Plumbing Shop	
	Building 21/B-6 – Link Trainer/Electric Shop	
	Building 41/B-17 – Utility Building/Storage	FUDS - Anticipated NFA after current phase is completed
	Building B-50 – Edging and Planning Shop	
	Building D-34 – Tire Shop	FUDS - Anticipated NFA after current phase is completed
	Building E-16 – Garage Storage	
	Building E-153 – Auto Body Paint Shop	
	Building E-31A – Heavy Equipment Repair Machine	
	<u>Building E-82 – Gas Tanker Repair</u>	
	Building E-146 – Paint Storage	
	Building B-20 – Ground School Communications/Carpenter Shop	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	Building 1/1D/C-4 – Barracks/Hobby Shop/Aircraft Maintenance	
	Building 1/1D/C-5 – Barracks/Hobby Shop/Aircraft Maintenance	
	Building E-10 – Ground School Projector/Laborer's Shop	
	Building 4B/C-3 – Latrine/Photographic Laboratory	
	D-44 - Fertilizer Building D-44 H Storage of Fertilizer	
	Building E-20 – Oil Storage	
	Building E-58 – Saw Mill	FUDS - Anticipated NFA after current phase is completed
	Building F-26 – Saw Mill	
	Building F-26A – Saw Mill	
	Building B-147 – Compressor Building	FUDS - Anticipated NFA after current phase is completed
	<u>F-10, D-1, B-129, Runway 35, and N-159 Aprons</u>	
	<u>A-17 - Line Shack</u>	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
	<u>A-18 - Line Shack</u>	FUDS - Anticipated NFA after current phase is completed
	A-34-B - Aircraft Operations Line Shack	
USACE SMP Project 12 – CON-HTRW (POL Storage and Distribution mostly located in central portion of MB)	Building F-14 – Gas Station	FUDS - Anticipated NFA after current phase is completed
	Building 7/E-19 – Bulk Oil Storage	FUDS - Anticipated NFA after current phase is completed
	Building B-5A – Heating Unit House	FUDS - Anticipated NFA after current phase is completed
	A-46 B - Jet Fuel Storage Tank Status: Closed in Place	FUDS - Anticipated NFA after current phase is completed
	A-46A - Jet Fuel Storage Tank Status: Closed in Place	FUDS - Anticipated NFA after current phase is completed
	Building E-56 – Ship Service Gasoline Station	
	Building A-46 – Jet Fuel Receiving Station	FUDS (but likely no contaminants; might have to revisit later if contaminants found)
	Pipeline on WMB	FUDS - Anticipated NFA after current phase is completed
USACE SMP Project 13 – HTRW (Old WWTP located on north central portion of MB)	<u>Old WWTP</u>	

USACE Project No. or NASA Site Name/No.	Areas within Projects	Clarification of Responsibility
USACE SMP Project 15 - HTRW (Active Remediation Projects)	Site 9 Abandoned Drum Dump	FUDS - Anticipated NFA after current phase is completed
	Construction Debris Landfill (CDL)	
	<u>Site 14 Debris Pile</u>	FUDS - Anticipated NFA after current phase is completed
	<u>Site 15 Debris Pile</u>	FUDS - Anticipated NFA after current phase is completed
	Site 48-M-Area Disturbed Soil	FUDS - Anticipated NFA after current phase is completed
	Site 49 - Runway 10/28 West End Disturbed Soil Site	FUDS - Anticipated NFA after current phase is completed
	<u>Site 50 – Boat Basin Disturbed Soil Site</u>	FUDS - Anticipated NFA after current phase is completed
	<u>Site 51 – Airplane Parts Disposal Area</u>	FUDS - Anticipated NFA after current phase is completed
	Site 52 – Runway 04/22 North End Construction Debris Area	FUDS - Anticipated NFA after current phase is completed
USACE Project 17PRP/HTRW Main Base (includes a variety of AOIs from the Main Base Sector)	B-51 - Plating Shop B-51 B	
	F-10 - NAOTS Hangar (ORD), Technical Services Shop and Offices F-10 J	
	D-44 - Fertilizer Building D-44 H Storage of Fertilizer (should be listed under Project 11)	
	N-159 - Air Maintenance Hangar N-159 In Use by NASA	

(1) Sites identified as FUDS Sites in Attachment A Memorandum of Agreement Wallops Flight Facility, VA Department of the Army & National Aeronautics and Space Administration 2/26/2015