FINAL

2015 UPDATE PROJECT MANAGEMENT PLAN

PERFORMANCE BASED REMEDIATION (PBR)

AT FORMER GRIFFISS AFB, NEW YORK

Project Number JREZ20XX7208

Contract Number FA8903-10-D-8595

Delivery Order 0014

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AECOM	AECOM Technical Services
AF	Air Force
AFCEC	Air Force Civil Engineer Center
AFRPA	Air Force Real Property Agency
AOC	Area of Concern
AST	aboveground storage tank
BFSA	Bulk Fuel Storage Area
BGS	below ground surface
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylene
CAPE	Cape Environmental Management Inc
CDRL	Contract Data Requirements List
CDUT	Contractor Data Uploading Tool
CE	Certified Ecologist
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFM	cubic feet per minute
CHMM	Certified Hazardous Materials Manager
CIH	Certified Industrial Hygienist
CO	Contracting Officer
COC	chemical of concern
COR	Contracting Officer Representative
CPSMR	Contractor's Progress, Status and Management Report
CSP	Certified Safety Professional
DO	dissolved oxygen
DPT	Direct push technology
ECA	External Certificate Authority
EPA	U.S. Environmental Protection Agency
ERPIMS	Environmental Resources Program Information Management System
ESD	Explanation of Significant Differences
EPS	Electrical Power Substation
FFA	Federal Facilities Agreement
FOST	Finding of Suitability to Transfer
FPM	FPM Remediations, Inc.

FT	feet
GIS	Geographic Information Systems
GMO	General Manager of Operations
GRIFFISS	Former Griffiss Air Force Base
LEL	lower explosive limit
LRA	Local Reuse Authority
LTM	long-term monitoring
LUC/IC	Land Use Control/Institutional Control
MAROS	Monitoring and Remediation Optimization Systems
MCL	maximum contaminant level
NFA	no further action
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operations and maintenance
OPS	Operating Properly and Successfully
ORP	oxidation-reduction potential
ORC	oxygen release compound
OSHA	Occupational Safety and Health Administration
OWS	Oil/Water Separator
P&A	plugging and abandonment
PBR	Performance Based Remediation
PCB	polychlorinated biphenyl
PE	Professional Engineer
PG	Professional Geologist
PGM	Program Manager
PID	photo-ionization detector
PM	Project Manager
PMP	Project Management Plan
POC	point of contact
POP	period of performance
PPM	part per million
PWS	Performance Work Statement
QC	quality control
QCP	Quality Control Plan

QSM	Quality Systems Manager
QSM	Quality Systems Manual
RA	remedial action
RACR	Remedial Action Completion Report
RA-O	Remedial Action Operations
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI	Remedial Investigation
ROD	Record of Decision
S&H	safety and health
SCGs	Groundwater Standards, Criteria, and Guidance values
SHM	Safety and Health Manager
SMC	Six Mile Creek
SOP	standard operating procedure
SOW	Statement of Objectives
SSHP	Site Safety and Health Plan
SVI	soil vapor intrusion
SVOCs	semi-volatile organic compounds
TCE	trichloroethene
TM	Task Manager
TMC	Three Mile Creek
TO	Task Order
UFP-QAPP	Uniform Federal Policy Quality Assurance Project Plan
URL	Uniform Resource Locator
UST	underground storage tank
VES	vacuum enhanced skimming
VOC	volatile organic compound
WSA	Weapon Storage Area

1.0 INTRODUCTION

Cape Environmental Management Inc (CAPE) was issued Delivery Order (Task Order [TO]) 0014 under Contract Number FA8903-10-D-8595 by the Air Force Civil Engineer Center (AFCEC) in December 2010. The Performance Work Statement (PWS) issued by AFCEC for this TO is dated 15 October 2010 and is titled "*Performance Based-Remediation (PBR) at Former Griffiss AFB, NY*". This is the final revision of the Project Management Plan (PMP) per the outlined contract milestones. The original PMP was submitted in May 2011 and subsequently updated in June 2013, October 2013, and June 2014, The October 2013 PMP required a greater level of effort so that Contract Modifications 0002 and 0003 were appropriately addressed in the PMP and the related project schedule. These changes addressed the revised objectives for seven sites and the addition of two new sites to the contract.

CAPE has maintained the original contract PBR team that is committed to maximizing site closures and minimizing future Air Force environmental liabilities. The CAPE Team is composed of CAPE, FPM Remediations, Inc. (FPM), and AECOM Technical Services (AECOM). The CAPE Team offers over 30 years of combined experience at the Former Griffiss Air Force Base (GRIFFISS) and has also worked extensively with the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency (EPA) Region 2. The CAPE Team's technical strategy is to reduce the overall liability and life-cycle costs for the Air Force by obtaining closure with unrestricted reuse for the majority of sites; optimizing the exit strategy at other sites; and providing closures with restricted use where it provides the best value for the Air Force for the remaining sites.

1.1 Facility Background

GRIFFISS occupies approximately 3,552 acres in Oneida County, New York. The base is a former U.S. Air Force Air Combat Command installation situated within the city limits of Rome, New York, approximately 10 miles west of Utica, New York (Figure 1). The base was opened on February 1, 1942, as the Rome Air Depot. In 1987, the EPA added the base to the National Priorities List, and in 1990, the U.S. Air Force, the NYSDEC, and the EPA entered into a Federal Facilities Agreement. In 1993, GRIFFISS was designated for realignment under the federal Base Closure and Realignment Act and subsequently deactivated. This PBR project is part of the BRAC (Base Realignment and Closure) environmental restoration program. Property transfers have occurred through Economic Development Conveyances Agreements, Public Benefit Conveyance Agreements, Federal to Federal transfers, negotiated sales and reversion. All property transfer actions are complete. A "Whole Base" property transfer ceremony was held on January 22, 2014.

1.2 Site Geology

GRIFFISS lies in the Mohawk Valley Lowland, just north of the Allegheny Plateau. The land surface generally slopes toward the south with the highest elevations in the northeast and northern areas of the base. Elevations range from 430 feet above mean sea level in the southern extremity of the property to 600 feet above mean sea level near the northeast perimeter. The landforms in the area are a product of glacial deposition and erosion, and the erosion and the depositional processes of the Mohawk River that produced features such as valleys, floodplains, and terraces.

The site geology is characterized by dense soils composed of fine- to medium-grained sand with silt and occasional clay lenses. The water table elevation ranges from 16 feet to 20 feet below ground surface. Shallow groundwater flow across the base generally moves from the northeast toward the Mohawk River and New York State Barge Canal to the south.

Groundwater aquifers consist of the bedrock and overlying unconsolidated sediments. The bedrock forms a confined aquifer and the unconsolidated sediments form an unconfined aquifer. The two aquifers are separated by the Rome Till which acts as a vertical and horizontal aquitard between the two. Groundwater flows from northeast to southwest and follows the topography and the gentle dip of bedrock to the Mohawk River to the south-southwest.

1.3 Summary of Sites

Each original site covered under this TO and the additional sites added under contract modification 0002 as awarded on August 29, 2012 is summarized in Table 3-1. Thirty-five (35) of the 47 sites included in this PBR contract are being addressed following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. The remaining 12 sites are petroleum sites requiring closure under the NYSDEC Spills Program. SD052 is listed twice as there are soil vapor intrusion (SVI) system operations and maintenance (O&M) and LUC/IC and Five-Year Reviews at remediation sites that are now being operated and maintained under this contract. The sites are shown on Plate 1 and Plate 2. They are divided into several physical/regulatory categories, which are discussed in the following sections.

The CAPE Team will also provide support for Restoration Advisory Board (RAB) meetings, BRAC Cleanup Team meetings, Geographic Information Systems (GIS), community relations, and property transfer.

To date, RAB Meetings and onsite meetings with all stakeholders have been completed on November 16, 2011; December 6, 2012; and December 11, 2013. The RAB Meeting scheduled for December 11, 2014 was postponed due to Winter Storm Damon and will

be rescheduled for June 2015. Semiannual onsite meetings with the USEPA and the NYSDEC have been completed on March 11, 2011; April 24, 2012; June 27, 2013; and June 12, 2014.

1.3.1 CERCLA Landfills

Five landfill sites (LF001-Landfill 1, LF002-Landfills 2&3, LF003-Landfill 7, LF007-Landfill 5, and LF009-Landfill 6**)** are capped under ROD requirements, and are presently undergoing long-term groundwater monitoring and cap maintenance. The RODs together with NYSDEC Part 360 landfill regulations dictate that landfill unrestricted closure is not possible. The CAPE Team will implement optimized exit strategies at these sites and continue with landfill post-closure monitoring and maintenance. To date, the number of monitoring wells for Landfills 1 and 6 has been optimized by reducing the number of wells requiring sampling and analysis for VOCs. For Landfills 1, 2/3, and 6, the frequency of landfill gas monitoring has been optimized by reducing needed sampling events from quarterly to semiannual. For Landfills 2/3, 5, and 7 the frequency of groundwater monitoring events have been reduced from annual to biennial. Further optimization processes and strategies will be recommended following the 2015 LTM period. The current optimization strategies were provided in the 2014 LTM Report for Landfill Sites.

1.3.2 CERCLA Creeks (Site Closures Approved 9/2/14)

The original approach for the Three Mile Creek (SD031) and Six Mile Creek (SD032) sites was that they would continue to undergo long-term monitoring activities that focused on surface water/sediment and fish tissue sampling to monitor PCB contaminant concentrations in these ecosystems. The RODs required that discharges to the two creeks be eliminated while the Long-Term Monitoring (LTM) Work Plans specify assessing trending data with respect to stabilization and Remedial Investigation (RI) observed contaminant levels to assess when monitoring can cease. Historical data and planned activities completed through 2012 for these sites as outlined in the Final Design/Plan Remedy Optimization document indicate that these sites could be closed. As a result of the recent site data collected for the two sites, as documented in the 2011 Annual LTM Report, a meeting was completed between AFCEC, FPM, NYSDEC, EPA, and NYSDEC Fish and Wildlife representatives on March 26, 2012. It was decided that the next step in the site closure process would be the submittal of a Remedial Action Completion Report (RACR) that would document completion and closure of remedial actions at the SD031 and SD032 sites.

The draft version of the Remedial Action Completion Report (RACR) was submitted for regulatory review on September 4, 2012. Associated site walks supporting this closure step were completed on October 3, 2012.

Per feedback during discussions at the December 6, 2012 Meeting with Regulatory Agencies, it was decided that the RACR Report would be resubmitted with a wetland inspection report from the October 3, 2012 site visit as an appendix to this report. The RACR was resubmitted as Final on January 10, 2013. A formal letter expressing Fish and Wildlife concerns was received from NYSDEC on September 19, 2013. CAPE, FPM, and AFCEC submitted a response to comments letters for SD031and SD032 to NYSDEC respectively on October 28, 2013 and December 20, 2013. The 30-day comment period per the Federal Facility Agreement (FFA) for NYSDEC expired on January 20, 2014. NYSDEC stated during the January 30, 2014 meeting that a response to these letters would not be forthcoming. AFCEC prepared a final position letter to EPA Region 2 requesting closure of these two sites. This letter was submitted on February 25, 2014. Approval of site closures for SD031 and SD032 were received on September 2, 2014.

1.3.3 CERCLA SVI Sites

The RODs and the ongoing remediation of the sites constrain the SVI sites to an optimized exit strategy outcome. The CAPE Team will continue to refine and implement an SVI exit strategy at these sites. Given that the underlying sources of chlorinated compounds will be present through 2015, closure of the SVI sites is not feasible.

Buildings 774, 776, 785 and 786 at Site SD052 are presently in the Proposed Plan and ROD stages of selecting SVI remedies. SVI remedy installation is not part of this project; however, determination of Operating Properly and Successfully (OPS), if required, and long-term O&M will be performed at SVI sites under this contract. Air volatile organic compound (VOC) sampling will be performed at these sites as appropriate. FPM will continue performing onsite sampling activities under this contract and prepare quarterly reports.

1.3.4 CERCLA LUC/IC Sites

LUC/IC activities will be completed by FPM at these sites for the duration of this contract in accordance with the RODs that the Air Force negotiated with the EPA and NYSDEC for these sites. These sites are: ST006-Building 101-UST (Yellow Sub Battery Acid Disposal); SS008-Building 112-PCB Dump Area; DP011-Building 3 Drywell, DP012-Building 301: DP013-Building 255, 2 drywells; DP015-Building 219 Drywell; SS017- Lot 69 Former Waste Storage; DP022-Building 222; SS023-Building 20 Locomotive Roundhouse; SS024-Fire Demo Area; SS025-T-9 Storage Area; FT030-Fire Training Area; SS033-Coal Storage Area; ST036- Building 110 Aqua System; SS044-Substation Electrical Power PCB Site; SD050-Building 214; SD052-01, 02, 04, & 05 (Apron 2 Chlorinated Plume, Building 775 Chlorinated Plume, Landfill 6 Chlorinated Plume, Building 817 Chlorinated Plume); SS062-AOC-9 Weapons Storage Area, AOI72-Mobile Avenue Former Drum Storage Area and DW-211-01-Building 211 Drywell.

Hard-wired LUC/ICs include non-residential LUC/ICs driven by the underlying RIs that cannot be removed without returning to the RI phase of the CERCLA process. Engineering controls will be utilized to ensure that implemented remedies remain effective.

The CAPE Team was tasked to remove soft LUC/ICs that include groundwater use restrictions that can be lifted when the groundwater concentrations attain New York State (NYS) groundwater standards or guidance values, and LUC/ICs that can be removed without re-opening the RODs. As of June 18, 2013, removal of all groundwater restrictions for these sites have been approved. The sites are:

- DP012/Building 301 Entomology Shop Drywell
- DP013/Building 255
- DP015/Building 219 Drywell
- DP022/Building 222-Battery Acid Disposal Pit
- SS017/Lot 69
- SS025/Site T-9
- SD050/Building 214-Former Vehicle Maintenance Shop-Oil Water Separator

The CAPE Team is a member of Dig Safely New York and team member FPM is electronically notified via email as dig permits are submitted at GRIFFISS. This process ensures that the LUC/ICs are maintained and practiced as work is conducted. This will also create an early warning system for the Air Force regarding potential noncompliance with the LUC/ICs.

Annual LUC/IC inspections and Five-Year Reviews will continue to be performed for the five chlorinated plume sites; remedy installation and Operating Properly and Successfully (OPS) determinations will be completed under a different contract by others. Current performance monitoring results for SVI-52 Site-Buildings 774, 776, 785 and 786 indicate that the system and expected results are within design expectations. No exceedances in air quality with respect to health and safety regulations within the four buildings have been observed over the contract period. Nineteen (19) additional CERCLA sites require LUC/IC monitoring and Five-Year Reviews only. The number of CERCLA and Petroleum sites requiring annual inspection is 26 sites. All 19 original CERCLA sites will be included in the Five-Year Review Report. The Five-Year Review Report has been initiated, and it is anticipated that a Draft Report will be submitted for Regulatory review in June 2015.On August 29, 2012, Contract Modification 002 was approved and revised the site goals for nine of the CERCLA sites to achievement of unrestricted closure by the end date of this contract in 2015. These sites are: ST006-Building 101-UST (Yellow Sub Battery Acid Disposal), DP012-Building 301, DP013-Building 255, DP015-Building 219 Drywell, SS024-Fire Demo Area, FT030-Fire Training Area,

SD050-Building 214 and AOI 72-Mobile Avenue Former Drum Storage Area and DW211-01-Building 211 Drywell.

Because of the time-critical schedule to meet unrestricted site closure for ST006 by December 31, 2015, Contract Modification 03, Option 2 was awarded on July 9, 2013. This award provided the funding to initiate acquisition of the necessary project elements to support the installation of an SVI Mitigation System at ST006 to address regulatory concerns regarding vapor intrusion. All equipment was delivered and installed in October 2013. The system has been fully operational since the end of October 2013 and all baseline sampling activities in support of monitoring system performance were completed in November 2013. The ST006-Building 101 site continues to be under remediation and monitoring. Based on collected data through December 2014, the system has been effective in removing remaining contaminant mass (TCE) from the subsurface. The Quarter 4, 2014 O&M results indicated that there is an increase in TCE concentrations in vapor monitoring point 101VMP-02 as compared to the baseline concentration measured in October of 2013 at this location. This result is not unexpected as TCE is being pulled from the area of highest concentrations of contaminants at this monitoring location. Once all residual sub-slab vapors have been extracted, it is expected that sub-slab vapor concentrations in 101VMP-02 will steadily decrease. The sampling results from the other two monitoring points, 101VMP-01 and 101VMP-03, have remained below screening levels. TCE has not been detected in any indoor or outdoor air samples. System shut-down and rebound monitoring continues to be evaluated with respect to initiating this phase of remedial action. It is anticipated that this may be initiated in spring 2015. Concern remains that based on SVI ROD, USEPA is now considering that monitoring continues beyond the POP before NYSDEC and USEPA approve site closure.

As of March 2015 the following activities have been completed for the CERCLA sites assigned under this contract.

DP011-Building 3 Drywell *(Site Closure Achieved June 18, 2013)*

The original contract objective was to achieve unrestricted site closure status by the close of 2012. Due to delays in regulatory review this goal of unrestricted site closure was achieved in June 18, 2013. Site closure eliminated all deed restrictions for this site.

SS023-Building 20 Locomotive Round House-Contaminated Soil *(Site Closure Achieved June 18, 2013)*

The Site Closure Report was submitted as Final on March 6, 2012 after addressing all regulatory comments. No additional comments were received. Email approval of the final Site Closure Report was received from Doug Pocze/EPA on April 23, 2012. A formal approval letter from EPA was received on June 18, 2013. Analytical results

obtained from annual groundwater LTM activities from 2001 to 2004 confirmed that all groundwater COC concentrations were below NYS Groundwater Standards or attributed to background conditions. Additionally, contaminated soil, identified during the RI at B20SB-5, was excavated from the site, and confirmatory soil sampling confirmed that soil cleanup objectives were met. The confirmatory soil sampling results were also below the current NYS Unrestricted Use Soil Cleanup Objectives (Table 375-6.8, 6 NYCRR Part 375, December 2006).

The contract objective for SS023 was to achieve unrestricted site closure by the end of 2012. Formal regulatory closure was confirmed via a formal letter received from EPA on June 18, 2013. Delays in regulatory reviews resulted in this goal being met slightly behind the originally anticipated milestone date.

SS060: STW-1300 Building 35 ***(Site Closure Achieved September 9, 2014)***

Analytical data from the June 2012 LTM sampling event indicated that chlorinated hydrocarbons concentrations were slightly above NYS Class GA Groundwater Standards and that an additional carbon source injection would be prudent to replenish subsurface carbon to promote a type 1 environment which is conducive for the dechlorination of the residual contamination. Newman Zone® was used as the carbon source at a quantity of 1,000 pounds. The Newman Zone® was dissolved in water at a 2 percent solution. As a follow-up to this injection event, a groundwater sample was collected from B035MW-4 in late June 2013. Analytical results for this sampling event were supportive of initiating preparation of the Closure Report for this site. The Draft Closure Report was submitted for NYSDEC and EPA review on November 11, 2013. On March 13, 2014, CAPE received a letter form NYSDEC with comments from NYSDOH that an additional round of groundwater sampling would be required at the site to address a slight exceedance of vinyl chloride detected in one well at the site. This well was resampled on April 8, 2014. Analytical results for this sample indicated that all contaminants of concern (COCs) met NYSDEC groundwater standards. An addendum to the Closure Report was submitted for NYSDEC and EPA review in June 2014. Site closure approval was received from NYSDEC and EPA on September 9, 2014.

The original objective for this site was to achieve restricted site closure by 2012. Due to delays in regulatory reviews and subsequent requests for additional sampling, this objective was not achieved until September 9, 2014. Site restrictions will remain as a result of soil chemical concentrations above residential use criteria (below industrial/commercial use criteria). These restrictions will entail notifying contractors planning excavation in the affected area of the contaminated soil and any required measures.

Unknown Sites

The contract was funded for the additional investigation of up to 10 unknown sites. Presently two unknown sites have been identified and both sites have progressed to site investigation activities for both sites. One site has progressed to closure pending status. These two sites are summarized below.

Unknown Site # 1- AOI 474

The first unknown site identified under this contract was AOI 474. This site had been identified as an area of unauthorized disposal activities (Junk Pile: old drums and glass) at LF002. This site required general cleanup of debris and cleanup and surface soil sampling to determine if any environmental impacts have occurred. A technical memorandum work plan was finalized on March 6, 2012. Sampling activities were completed from March 25-26, 2012. Debris was also removed from this unauthorized dump area. Data were evaluated in June 2012 and a working internal draft Site Investigation Report was submitted for AFCEC review on August 17, 2012. The draft report was submitted for regulatory review on October 5, 2012. Regulatory review comments were expected by November 20, 2012. The report was submitted as Final to all stakeholders on March 5, 2013.

The Removal Action Work Plan for this site was submitted for NYSDEC and EPA review on June 26, 2013. NYSDEC and EPA review comments were due on August 20, 2013. NYSDEC and EPA have stated that they did not have any comments or concerns with this work plan as submitted. The work plan was resubmitted as final on October 23, 2013. Field activities were completed in late October 2013. Confirmation sampling of the excavation indicated that all contaminants of concern were below respective NYSDEC cleanup standards. The internal working draft of the Remedial Action Complete and Site Closure Report was submitted for AFCEC review on January 16, 2014. AFCEC review comments were received on February 4, 2014 and the report submitted as draft for EPA and NYSDEC review on February 10, 2014. NYSDEC and EPA review comments were due on March 25, 2014.

The Final Closure Report was submitted for NYSDEC and EPA review on July 17, 2014. Late comments were received from NYSDOH post expiration of the final 30-day review period. NYSDOH requested via NYSDEC that GW samples be collected in the vicinity of the groundwater seep noted in the Closure Report. The requested groundwater samples were collected in November 2014. The revised Closure Report was submitted for regulatory review on January 15, 2015. Closure approval is anticipated by the close of the first quarter of 2015.

Unknown Site #2- Building 785 Pipeline

During remediation activities at SS066 Building 786, it was discovered that a new spill area was associated with the pipeline that was located in the vicinity of Building 785. An investigation was authorized by AFCEC and results indicate that this site would need to be reported as a new spill site. The internal draft of the site investigation work plan was approved by AFCEC on September 9, 2014 and resubmitted as draft for NYSDEC review. The site investigation was completed and the Site Investigation and Remedial Action Plan was submitted for AFCEC review on December 12, 2014. Review comments were received from AFCEC and the report is presently under revision and scheduled for submittal to NYSDEC by February 27, 2015.

Contract Modification 2 Sites: ST006, DP012, DP013, DP015, SS024, FT030, SD050, AOI 72, and DW-211-01

Site activities for these nine sites as modified by Contract Modification 0002 continued to progress toward achievement of the revised site objective of unrestricted site closure. All scheduled site investigation activities were completed by the close of 2013 with the exception of site DW-211, where additional sampling was requested by the regulatory agencies. The following reports associated with these activities are summarized below.

ST006-Building 101: The Soil Vapor Intrusion Evaluation Report for ST006-Building 101 was submitted as final on September 4, 2013. The final 30-day regulatory review period expired on October 4, 2013. NYSDEC and EPA have indicated that they had no comments on this report. The installation of a remediation system had been recommended as first stated in the Draft report submittal on June 25, 2013. Because of the time-critical schedule to meet unrestricted site closure by December 31, 2015, Contract Modification 03, Option 2 was awarded on July 9, 2013. This award provided the funding to initiate acquisition of the necessary project elements to support the installation of an SVI Mitigation System at ST006 to address regulatory concerns regarding vapor intrusion. All equipment was delivered and installed in October 2013. The system has been fully operational since the end of October 2013 and all baseline sampling activities in support of monitoring system performance were completed in November 2013.

The system start-up report and O&M Manual were submitted for AFCEC review on January 24, 2014. AFCEC review comments were received on February 24, 2014. The document was submitted as draft for NYSDEC and EPA review on April 30, 2014. Review comments from NYSDEC and EPA were due on June 15, 2014. No comments were received from EPA or NYSDEC, and therefore the report was resubmitted as final on July 17, 2014. The final 30-day review period expired on August 17, 2014. EPA and NYSDEC have indicated that they did not plan to provide comments on this document.

The Quarter 1, 2014 O&M Report for the ST006 SVE System was submitted for AFCEC review on May 7, 2014. Review comments from AFCEC were received on June 9, 2014. The Draft Report was submitted for NYSDCE and EPA review on July 25, 2014. Review comments are expected by September 9, 2014. EPA and NYSDEC have indicated that they did not plan to provide comments on this document. The report was resubmitted as final on September 15, 2014. The final 30-day review period lapsed on October 15, 2014. This report is final.

The Quarter 2, 2014 O&M Report for the ST006 SVE System was submitted for AFCEC review on September 2, 2014. Review comments from AFCEC were received on October 2, 2014. The Draft Report was submitted for NYSDCE and EPA review on November 5, 2014. Review comments were due on December 20, 2014. EPA and NYSDEC have indicated that they did not plan to provide comments on O&M Reports and would consider these reports informational. The report was submitted as final on December 29, 2014. The final 30-day Regulator review period lapsed on January 219, 2015. This report is final.

The Quarter 3, 2014 O&M Report for the ST006 SVE System was submitted for AFCEC review on October 31, 2014. AFCEC review comments are presently being incorporated into the revised report. The draft report was submitted for Regulatory review on January 7, 2015.

DP012- Building 301: The Site Investigation Report for DP012 was submitted as final to NYSDEC and EPA on December 11, 2013. The final 30-day review period lapsed on January 11, 2014. EPA and NYSDEC have indicated that no comments were forthcoming. The Site Closure Report was submitted for internal AFCEC review on September 11, 2014. Subsequent to requested revisions per AFCEC comments, the report was submitted for NYSDEC and EPA review on October 17, 2014. Regulatory Agency review comments were due by December 1, 2014. The final Site Closure Report was submitted to NYSDEC and EPA on December 12, 2014. Review comments from NYSDOH via NYSDEC were received on January 9, 2015. Responses to comments have been submitted and site closure is anticipated in the second quarter of 2015.

AOI-72: The Site Investigation Report and Work Plan for AOI-72 were submitted as final to NYSDEC and EPA on December 11, 2013. The final 30-day review period lapsed on January 11, 2014. EPA and NYSDEC have indicated that no comments were forthcoming. The site was excavated to a depth of 4 feet bgs in July 2014. Analytical results indicated that all COC concentrations were below NYSDEC Residential Use SCOs and support site closure. The internal working draft of the Site Closure Report was submitted for AFCEC review on July 2, 2014. The Draft Site Closure Report was submitted to NYSDEC and EPA on September 11, 2014. Review comments were due October 26, 2014. The report was resubmitted as final on November 5, 2014. The final

30-day Regulatory review period lapsed on December 5, 2014. Review comments from NYSDOH via NYSDEC were received on January 9, 2015. Responses to comments have been submitted and site closure is anticipated in the second quarter of 2015.

SS024-Fire Demonstration Area: The Site Investigation Report for SS024 was submitted for internal review by AFCEC on December 6, 2013. AFCEC review comments were received on January 27, 2014. The Draft Report was submitted for NYSDEC and EPA review on March 31, 2014. NYSDEC and EPA review comments were received on May 8, 2014. NYSDEC had concerns regarding Dieldrin, which had been detected at the SS024 site. Eight additional soils samples were collected and submitted for pesticide analysis on June 13, 2014 as requested by NYSDOH. Analytical results for the additional samples collected supported site closure.

An addendum to the Closure Report was submitted for internal AFCEC review on September 2, 2014. The report was submitted as draft for NYSDEC and EPA review on November 11, 2014. The additional data collected and revised risk assessment supported closure. Site closure is anticipated by the close of the first quarter of 2015.

DP013- Building 255: The Site Investigation and Closure Report for DP013 was submitted for AFCEC review on January 20, 2014. Review comments were received from AFCEC on February 5, 2014. The report was revised and submitted as draft to NYSDEC and EPA on February 11, 2014. NYSDEC and EPA comments were expected by March 26, 2014. EPA and NYSDEC had indicated verbally that no comments are forthcoming. The report was resubmitted as final on April 28, 2014. The final 30-day review period lapsed on May 28, 2014. Late comments were received from NYSDOH via NYSDEC in July 2014 regarding an elevated detection of chromium in a soil sample collected at the site. Additional soil samples were collected per NYSDEC request and submitted for total chromium and hexavalent chromium analysis. Analytical results supported site closure. An addendum to the Site Closure Report was submitted to NYSDEC and EPA on October 10, 2014. Late comments were again received from NYSDOH via NYSDEC on January 9, 2015. Responses to comments were submitted to NYSDEC and EPA on January 13, 2015. Closure status is pending and is expected by the close of the first quarter of 2015.

The FT030, DP015, and SD050 Closure Reports were submitted as final on September 4, 2013 to NYSDEC and EPA and they had indicated in October 2014 that closure letters would be issued as soon as they receive concurrence from NYSDOH. Subsequent to this statement, NYSDOH and EPA did provide additional concerns regarding site closure. These are summarized below.

FT030-Fire Training Area: The Site Investigation Report and Closure Report were submitted as final on September 4, 2013. A closure approval letter was received from NYSDEC on March 17, 2014. CAPE is still waiting on closure concurrence letter from

EPA (Bob Morse). This letter has been in preparation for several months, and Mr. Morse has indicated that he needs to get final approvals from his risk assessment group. Additional site background information was sent to Mr. Morse per his request on June 20, 2014. A conference call was completed on November 12, 2014 with EPA Risk assessment personnel (Marion Olsen and Chloe Metz), Mr. Morse, the EPA, and Heather Bishop, NYSDEC. The FT030 site was reviewed and discussed in detail. It was decided that the Closure Report would be resubmitted incorporating the latest Risk Assessors comments. The revised report was submitted on January 21, 2015 for EPA review. Site closure is anticipated by close of the first quarter of 2015.

DP015-Building 219: The Final Closure Report for DP015-Building 219 was submitted to NYSDEC and EPA on October 18, 2013. The final 30-day review period lapsed on November 18, 2013. NYSDEC and EPA had indicated verbally that they had no comments on the Closure Report and would issue site closure approval letters. NYSDEC did indicate that this was predicated on receiving concurrence from the NYSDOH. NYSDOH provided comments late via NYSDEC on June 9, 2014. Additional soil sampling from the 0-2-foot depth interval was requested by NYSDOH. RTCs were submitted to address review comments on July 11, 2014. The additional soil samples were collected on July 9, 2014. Analytical results for the additional samples supported site closure goals.

The Site Closure Report Addendum was submitted for regulatory review on November 6, 2014. The additional data collected addressed all regulatory concerns, and site closure is anticipated by early 2015.

SD050- Building 214: The Final Closure Report for SD050-Building 214 was submitted to NYSDEC and EPA on 10/18/13. The final 30 day review period lapsed on November 18, 2013. NYSDEC and EPA had indicated verbally that they had no comments on the Closure Report and would issue site closure approval letters. NYSDEC did indicate that this was predicated on receiving concurrence from the NYSDOH. NYSDOH provided comments late via NYSDEC on June 9, 2014. Additional soil sampling from the 0-2-foot depth interval was requested by NYSDOH. RTCs were submitted to address review comments on July 11, 2014. The additional soil samples were collected on July 9, 2014. Analytical results for the additional samples supported site closure goals.

The draft Site Closure Addendum Report was submitted for Regulatory review on November 6, 2014. The additional data collected addressed all regulatory concerns and site closure is anticipated by early 2015.

Annual LUC/IC Inspection Reports

Final LUC/IC Inspection Reports have been completed for 2011, 2012, and 2013. The draft 2014 LUC/IC Inspection Report was submitted for NYSDEC and EPA review on

January 9, 2015. Regulatory review comments are due on February 24, 2015. These reports will continue to be completed in the fourth quarter of each contract year after completion of each quarterly inspection event.

1.3.5 Petroleum Sites

The 12 petroleum sites (SD041-Building 782 Nosedock 1, SS054-Building 781 Pumphouse, SS020-Tank Farm 1&3, SS063-Apron 1, ST037-Building 771, SS064-Apron 2, SS065-Building 15, SS066-Building 786, SS067-Building 789, SS068-Building 7001, SS069-Bulk Fuel Storage Area, and SS070-Building 150) are constrained by the site-specific environmental setting, residual contamination levels, and the contract period of performance (POP). The CAPE Team's strategy will continue to aggressively allocate sufficient resources commensurate to complexity level of the respective sites to achieve NYSDEC spill closure within the contract period. Remediation systems that were in place at each site were optimized in 2011, and all upgrades were fully operational by May 2012. System repairs and upgrades have occurred as part of normal O&M activities. Some sites required only additional optimized monitoring to support closure while others required substantial remedial system modifications. Biosparging systems and /or bioventing systems have been installed at SS067, Sites Apron 1&2, SS054 Building 781 Pumphouse 1, and SS069 Bulk Fuel Storage Area. The remaining spill sites are undergoing monitoring. Annual LUC/IC inspections were and will be performed at the petroleum spill sites that have not been closed.

Quarterly groundwater monitoring events and O&M activities have now been completed in:

- April 2011 (spring/Quarter 2)
- July 2011(summer/Quarter 3)
- October 2011 (fall/Quarter 4)
- January 2012 (winter/Quarter 1)
- April 2012 (spring/Quarter 2)
- July 2012 (summer/Quarter 3)
- October 2012 (fall/Quarter 4),
- January 2013 (winter/Quarter 1)
- April 2013 (spring/Quarter 2)
- July 2013 (summer/Quarter 3)
- October 2013 (fall/Quarter 4)
- January 2014 (winter/Quarter 1)
- April 2014 (spring/Quarter 2)
- July 2014 (summer/Quarter 3)
- October 2014 (fall/Quarter 4)
- January 2015 (winter/Quarter 1)

SS020-Tank Farm 1&3 NYSDEC Spill # 9111733 ***(Site Closure Achieved September 24, 2013)***

Periodic biosparging using a mobile system was performed at the site from January 2011 until closure at the site. An additional injection round of persulfate was completed at Tank Farm 1&3 in October 2012. Follow-up sampling was completed in June 2013 to assess the effectiveness of the latest in-situ treatment of the remaining contaminants. Site remediation activities were monitored quarterly and indicated that the remediation approach was effective in reducing contaminants at the site. Quarterly groundwater sampling data indicated that cleanup criteria were met in early 2013. The site objective was to achieve Site Closure with unrestricted use by 2014. The Closure Report was submitted for NYSDEC review on July 30, 2013. The NYSDEC Spill Closure Letter was received on September 25, 2013. The report was resubmitted as final on September 28, 2013.

ST037-Building 771 Pumphouse 5 NYSDEC Spill # 8903144 ***(Site Closure Achieved 4/23/12)***

The Final Spill Closure Request and report was submitted to NYSDEC and all stakeholders on September 19, 2011. The original contract objective was to achieve site closure in 2011. NYSDEC closure approval was received on April 23, 2012. This contract milestone has been completed.

SD041-Building 782 Nosedock #1 NYSDEC Spill # 9413416

Site status remains in suspense pending NYSDEC Spills Group completion of review of the Closure Report. The Draft Final Closure Report was originally submitted for NYSDEC review on November 11, 2011. On October 11, 2012 AECOM and AFCEC met with Mark Tibbe to discuss review status on all pending petroleum site submittals, particularly all pending site closure requests. On December 6, 2012 the project team met with Mark Tibbe during the regulatory agency meetings held on site. Tibbe indicated what additional information he required related to soils data below the phreatic zone so that he could complete his review. AECOM prepared a short technical memorandum indicating the additional soils data that would be collected. Tibbe subsequently met with AECOM field staff in January to discuss and locate sample locations on site. Additional soil samples were collected in February 2013. Review of the analytical data indicates that it will support our closure request. The previously submitted closure report is being updated with the new data and boring logs from the February 2013 sampling event. Data from this event were presented to Mr. Tibbe of NYSDEC Spills Group, Utica, NY Office, and he has indicated that he would likely support closure of this site based on the recent sampling results. A follow-up meeting was scheduled with Mr. Tibbe on March 10, 2015. The revised report was issued in March 2014, and receipt of a spill closure letter from the NYSDEC Spills Group is expected in the second quarter of 2015.

SS054-Building 781 Pumphouse NYSDEC Spill # 9202658

As of May 9, 2012 system optimization activities have been completed through the installation of new focused biosparging wells; the connection of these new wells to existing biosparging system; and restart of the system in this optimized configuration. These activities also included the temporary isolation of the pre-existing well network to allow evaluation of remedial performance with the new configuration. Documentation of these activities was summarized in the Optimization Report Volume 1.

Site activities remain status quo, with a contract objective of achievement of an optimized exit strategy through 2015. Site activities will focus on continued optimization of the remediation system. Data indicate that the installation of new sparge wells has been effective in halting migration of the plume and reducing the volume of NAPL in the heart of the plume.

SS063-Apron 1 NYSDEC Spill # 9707954

In the first year of this contract (2011), additional site investigation activities were performed at this site; these included the installation of new focused biosparging wells, the connection of these new wells to the existing bioventing system, and restart of the system in this optimized configuration. Documentation of these activities was summarized in the Optimization Report Volume 1. Presently, site activities continue to focus on monitoring of the remediation system for effectiveness of the remediation approach and optimization of the sparge system. As part of optimization and O&M activities, the remediation system blowers were rebuilt in spring 2014 to improve efficiency.

In early 2012, NYSDEC requested additional historical site information in support of their evaluation of the site. Based on their subsequent review and request, additional soil samples were collected at the site. An additional Geoprobe investigation was completed in January 2014 to obtain the requested additional soils data and better delineate the extent of subsurface contamination. A Site Closure Report was submitted for AFCEC review on December 15, 2014. Review comments were received January 23, 2015. The draft report was submitted for NYSDEC review on March 6, 2015. Closure is expected in the second quarter of 2015.

SS064-Apron 2 NYSDEC Spill # 9713631

System optimization activities have been completed with installation of new focused biosparging wells, the connection of these new wells to existing biosparging systems, and restart of the systems in this optimized configuration on a number of these wells. These activities also included the installation of a new free-product recovery well in the southeastern corner of Apron 2 to support ongoing free-product recovery efforts in this

area. Documentation of these activities was summarized in the Optimization Report Volume. Site activities continue to be monitored for effectiveness of the biosparging remediation approach. The objective was to achieve site closure with unrestricted use by 2014. Site activities continued to be monitored for effectiveness of the biosparging remediation approach. This goal was to achieve site closure with unrestricted use by 2014. A soil boring program was implemented in spring 2013 in conjunction with scheduled activities for Apron 1 to rule out any issues that would impede attainment of site closure. Testing was completed via test pitting and soil removal around monitoring well AP2LD1SW at the northern edge of the Apron 2 to determine the source of the product in the well. The biosparging system has been shown to be very effective in reducing contaminant levels. It is presently planned to perform additional excavation at this site near Ellsworth Road in the winter, and in spring 2015 address remaining NAPL found in this area of the site. Site closure is anticipated in mid- 2015.

SS065-Building 15 NYSDEC Spill # 9709366 ***(Site Closure Achieved 1/8/14)***

A second focused in-situ chemical oxidation event was completed in October 2012. Approximately 1,000 pounds of Klozure CR (persulfate and calcium peroxide) were found in a 10'x15' area around monitoring well MW-12. Recent data indicate that no residual source remains at the site. The original objective was to achieve site closure with unrestricted use by 2015. A Draft Site Closure Report was submitted for NYSDEC review on October 29, 2013. NYSDEC approved closure of the site on January 8, 2014.

SS066-Building 786 Jet Fuel Pipeline NYSDEC Spill # 8910168 ***(Site Closure Achieved 1/7/15)***

System optimization activities were completed in early 2012 through the installation of new focused biosparging wells, the connection of these new wells to existing biosparging system, and through restart of the system in this optimized configuration. These activities also included the temporary isolation of the pre-existing well network to allow evaluation of remedial performance with the new configuration. Documentation of these activities was summarized in the Final Optimization Report Volume 1. It should be noted that the NYSDEC Spills Group has indicated they will not review or provide comments on any reports except for closure reports.

An issue was identified in March 2012 that CAPE's remediation efforts at the SS066 site were interfering with remediation activities being performed by Parsons Engineering under a USACE Kansas City District contract for the associated chlorinated plume located in the site area. CAPE was directed to cease biosparging activities, as our aerobic approach for remediating hydrocarbon contamination was perceived to be detrimental to the MNA approach (anaerobic) being used to remediate the chlorinated groundwater plume. Although CAPE presented a case that the biosparging activities being completed at the site were not interfering with remediation of the chlorinated plume, it was decided

that these activities would not be maintained and other remediation options would be evaluated. CAPE and team member AECOM revised the technical approach and performed limited excavation of a suspected source area in October through November 2013. Mark Tibbe of NYSDEC was on site during excavation activities and was in agreement that from the excavations completed it appears that a new spill/source area has been identified. This site has been identified as Unknown Site #2-Building 785 Pipeline. NYSDEC is in agreement with closing the two site spill numbers for SS066 as this original site area was demonstrated to be free of residual petroleum-impacted soils.

The Site Closure Report was submitted for AFCEC review on December 15, 2014. Closure approval for SS066 was received on December 8, 2014, with a formal closure letter provided by NYSDEC on January 7, 2015.

SS067-Building 789 NYSDEC Spill # 9810713

Additional site investigation and optimization work was completed in late 2011. These activities included the installation of new free-product recovery wells and evaluation of the existing free-product recovery system. The new wells were connected to the existing system, and modifications to the existing system were made to enhance free-product recovery performance. Bail down testing has been conducted and is ongoing. The recovery wells were restarted in November 2012. Documentation of these activities was included in the Remedial Optimization Report Volume 2 that was submitted to NYSDEC for review on June 28, 2013. This report was submitted as final in September 2013. Site conditions, via quarterly groundwater monitoring events, will continue to be monitored for the evaluation of the effectiveness of the remediation approach being utilized. Site objective is to achieve optimized exit strategy through 2015.

The SS067 remediation system throughout the contract period has been idled during the winter months. During shutdown periods, free product was manually pumped from the wells with recovery of approximately 30 gallons per week. The system typically has been restarted in late March or early April. The bladder pumps in the wells were replaced in spring 2014 to increase system efficiencies, which had deteriorated due to bio-fouling.

SS068-Building 7001 NYSDEC Spill # 970695 ***(Site Closure Achieved 1/7/15)***

System optimization activities were completed in late 2011 and included the installation of new focused biosparging wells, the connection of these new wells to existing bioventing system, and restart of the systems in an optimized configuration for the new well array. Documentation of these activities was included as part of a Remedial Optimization Report Volume 2 that was submitted to NYSDEC for review on June 28, 2013. Specific completed activities have included temporary re-establishment of oxygen infusion (iSOC®) at well 7001-MW-1 in September 2011; Installation of four new injection wells (two each) upgradient of wells 7001-MW-2 and 7001-MW-1 in October

2011 and implementation of full-time biosparging by running new piping from the existing biosparge system.

Over the contract period leading to site closure status, site conditions were monitored for effectiveness of the remediation approach being utilized. The original objective was to achieve Site Closure with unrestricted use by 2015. A soil boring program was completed at this site in summer 2013 to confirm the presence of any subsurface contamination in the "smear zone" per discussions with NYSDEC. Additional soil and groundwater samples were collected and submitted for analysis. Analytical results supported initiation of the site closure request to NYSDEC.

The internal draft Closure Report was submitted for AFCEC review on June 4, 2014. Review comments from AFCEC were received on July 8, 2014. The draft report was submitted for NYSDEC review on August 20, 2014. Site closure approval via an email was received on December 8, 2014. A formal closure letter was received on January 7, 2015. A final report will be prepared and submitted documenting that appropriate monitoring wells were abandoned and any needed site restoration activities completed. These activities will be completed in early spring 2015.

SS069-Bulk Fuel Storage Area NYSDEC Spill #s 9507364, 9810949, and 0009824 ***(Site Closure Achieved May 1, 2013)***

The Final Spill Closure Request and report was submitted to NYSDEC and all stakeholders April 15, 2013. The original contract objective was to achieve site closure in 2011. NYSDEC closure approval was received on May 1, 2013. This contract milestone has been completed.

SS070-Building 150-NYSDEC Spill # 0800273 ***(Site Closure Achieved 2/11/13)***

The Final Spill Closure Request and report was submitted to NYSDEC and all stakeholders on January 25, 2013, and subsequently revised and resubmitted on March 22, 2013 to include monitoring well abandonment documentation. The original contract objective was to achieve site closure in 2012. NYSDEC closure approval was received on February 11, 2013. This contract milestone has been completed.

1.4 Purpose of the Project Management Plan

The purpose of this PMP update is to describe any revisions that have or are suggested to maintain the overall management plan for meeting the project objectives. The PMP includes the project schedule, technical and management approach and resources required for the planning, execution, and completion of the performance objectives. The PMP is a living document that is used to manage the entire project from beginning to end. The CAPE Team will periodically review and update the PMP as necessary if changes in site

conditions, contaminants, regulatory stipulations, or stakeholder participation/concerns affect the execution strategy or achievement of the milestone schedules. It was originally planned that up to five updates would be completed over the contract period. Our approach will ensure that the PMP continues to function as an integrating document for risk management, client/stake-holder interactions, achieving project milestones and performance objectives, schedule control, and personnel and resource management. Changes to this PMP will be documented in the Project Management Plan Revision Summary in Appendix A. This is the final update of the PMP under this contract.

2.0 PROJECT RESOURCES

The CAPE Team will continue to execute this contract in order to achieve the site objectives and performance milestones, while ensuring that safety, quality, and regulatory goals are met. The CAPE Team will support this project with personnel who have the practical onsite experience, enabling them to propose the most effective approach for each site in order to maximize the impact of remediation activities, minimize life-cycle costs, and achieve the performance goals and objectives.

This section identifies the key CAPE Team resources that are in place to perform this TO. As prime, CAPE will be responsible for all program and project management functions. The successful management of this PBR and the achievement of performance objectives will be accomplished by integrating the technical leads from FPM and AECOM into our management approach. The project organization chart that identifies the structure and key personnel assigned to the project is shown on Figure 2. The organization chart will meet the requirements of Contract Data Requirements List (CDRL) A001l. Responsibilities of key personnel are described in the subsections below.

2.1 Program Manager

The Program Manager (PGM), Mr. Kurt Gates, Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP), and Certified Hazardous Materials Manager (CHMM), has the overall responsibility for all technical, contractual, safety, and administrative matters for CAPE under this contract. Mr. Gates will serve as the focal point for coordination of all contracts-related issues with AFCEC, and will facilitate the CAPE Team's ability to consistently deliver a high-quality work product, on time and within budget. Mr. Gates will delegate the day-to-day responsibilities to the Project Manager (PM) and quality control (QC) management to the Quality Systems Manager (QSM). The PGM has the ultimate authority and responsibility for the establishment and maintenance of program administration, control programs, and procedures. Mr. Gates' duties include, but are not limited to, the following:

- Establishing and interpreting program policies

- Preparing long-range program plans
- Implementing contract requirements.

2.2 Project Manager

Mr. Philip Dula is assigned as the PM for this TO. The role of the PM will be to maintain administrative responsibility, authority, and accountability for the project, ensuring client satisfaction and providing all needed resources to deliver this TO on time, and with no quality, safety, or regulatory issues. In executing these duties, the PM is responsible for meeting all contractual requirements and ensuring that work is executed in conformance with approved plans. The PM will be the primary point of contact (POC) with AFCEC and GRIFFISS, and will be responsible for the overall execution of this project including cost, project status, schedule updates, and technical quality.

The PM will work directly with the management and technical staff to maintain safety, to maintain the technical quality of the work, and to manage the budget and schedule. The PM reports to the PGM. The PM's responsibilities include:

- Interacting with AFCEC and GRIFFISS
- Monitoring schedule and cost performance
- Managing project work assignments, technical staff performance, and technical quality of work
- Providing additional management or technical support when needed
- Coordinating the development, implementation, and enforcement of all plans
- Serving as final reviewer on all technical documents produced as a result of this project
- Ensuring that the necessary resources are available for this project to be completed safely and in compliance with the *Site Safety and Health Plan* (SSHP), GRIFFISS requirements, and Occupational Safety and Health Administration (OSHA) regulations
- Managing dedicated professional subcontract activities.

2.3 General Manager of Operations

Mr. Mike Healy is the General Manager of Operations (GMO), who directly oversees Mr. Dula. Mr. Healy has work experience at GRIFFISS dating back to 2001. He will ensure that a high degree of client responsiveness is maintained, will review and approve

subcontracts, will assist the PM as necessary with technical and management issues, will ensure technical quality of deliverables, and will ensure achievement of performance objectives and compliance with the milestone schedule.

Mr. Healy will participate in monthly progress meetings as needed or requested. His duties include, but are not limited to, the following:

- Ensuring the availability of resources to the PM
- Approving budgets and subcontracts
- Identifying and avoiding potential problems or conflicts
- Ensuring safety and quality of all work.

2.4 Safety and Health Manager

Mr. Glen Mayekawa, CIH, will act as the Safety and Health Manager (SHM) and is responsible for overseeing project safety performance. He will authorize all aspects of the SSHP. Any proposed deviations from the approved SSHP or changes in expected site conditions will be immediately presented to the SHM for consideration/approval. The SHM coordinates with the PM, but reports directly to CAPE's Chief Executive Officer. Duties of the SHM include, but are not limited to, the following:

- Serving as the liaison between corporate safety and health (S&H) and the PM
- Overseeing the administration of the CAPE Safety and Health Program
- Ensuring that the appropriate training occurs and that appropriate training and medical records are kept current and on site
- Determining what resources are required to adequately address S&H issues and communicating those resource requirements to the PM
- Developing an activity hazard analysis for any new activity or innovative technology that is not currently in the SSHP
- Conducting random S&H audits in the field
- Assisting in accident investigations with field personnel and reporting to accident review boards, if necessary.

2.5 Quality Systems Manager

The QSM for this project is Henry Vaca of CAPE. Henry has a degree in mechanical

engineering, and an advanced degree in Quality Assurance. Under this program, the QSM communicates directly with the PM. The QSM is also responsible for the development and interpretation of QC policies and procedures, and carries the requisite authority to oversee and execute QC activities for the projects to be implemented under this contract. The QSM is responsible for establishing the definable features of work and the appropriate QC monitoring and testing. He will provide overall direction to the program QC function; perform audits, surveillance, and document reviews; and execute other quality functions as required in the Quality Control Plan (QCP). He will interface with Mr. Dula on the quality functions of the program and will coordinate all QC activities. Implementation of the QC duties will be delegated to the QC Officer in the field. Duties of the QSM include, but are not limited to, the following:

- Implementing the project QC requirements
- Overseeing onsite QC staff
- Identifying and reporting nonconforming items or activities
- Initiating or recommending corrective actions
- Verifying implementation of corrective actions
- Notifying the PM of conditions adverse to quality that cannot be resolved at the project level
- Overseeing field activities for compliance with contract requirements.

2.6 Senior Engineer

Mr. Merle Miller, Professional Engineer (PE), is assigned as the Senior Engineer. He is responsible for assuring all environmental, civil, and process engineering support goals are achieved, managing the technical aspects of project execution, and reviewing all technical documents. Mr. Miller will also coordinate the technical efforts of CAPE's subcontractors. His duties include:

- Directing efforts of staff assigned to environmental, civil and geotechnical engineering tasks
- Approving selection of sampling personnel
- Approving selection of analytical laboratory
- Providing technical direction to subcontractors.

2.7 CAPE Team Subcontractors

CAPE will direct all subcontractors and will ensure that subcontractors are performing work in accordance with schedule, safety, and quality requirements. Proper subcontract management will generate effective work progress that is compliant with federal, state, and local requirements and provides AFCEC with seamless execution. Contractual agreements between CAPE and the CAPE Team subcontractors contain flow-down clauses that require subcontractors to meet all appropriate GRIFFISS, Federal, and State requirements. Onsite subcontractors will coordinate their activities through CAPE Team personnel and will be required to submit daily reports documenting their activities. CAPE Team members and their primary responsibilities are discussed below. Other subcontractors may be utilized by the PM as needed.

2.7.1 FPM

FPM is a New York-based small business and has maintained a site office at GRIFFISS for the past 19 years. FPM will utilize their experience at all CERCLA sites identified in the PBR. FPM's value to the CAPE Team includes an office on-base, experience working at all 47 sites listed in the PBR, experience in site closure and completing property transfers. FPM has technical staff with experience at GRIFFISS extending back to 1997. To that end, FPM will provide dedicated onsite staff to meet the daily project requirements. FPM will conduct site inspections, perform long-term monitoring, manage GIS data, and provide RAB and property transfer support.

2.7.2 AECOM

AECOM's expertise will be used for all petroleum spill sites. AECOM will work toward attaining a NYSDEC spill closure letter for each site regulated under the NYSDEC Spills Program and proposed for site closure during this contract. AECOM will be the technical lead and primary regulatory interface for these sites. AECOM will have their vast nationwide resources of experts and specialists available to focus on regulatory requirements and negotiations, remediation, process optimization, sustainability, and stream and sediment dynamics. Highlights of AECOM's experience include over 20 years as a prime consultant with NYSDEC, including recently being awarded a $20M follow-on contract. A major benefit AECOM brings to the CAPE Team is office locations in Syracuse, NY, Latham, NY, and Buffalo NY. AECOM has performed project work at GRIFFISS for over six years.

2.8 FPM Task Manager

The Task Manager (TM) for FPM is Gaby Atik, PE. Mr. Atik has 26 years of environmental engineering and management experience within New York, including 19 years at GRIFFISS. He will communicate weekly with the CAPE PM, will provide

monthly reports, schedule updates and invoices to the CAPE PM and may communicate with AFCEC and regulators upon agreement with the CAPE PM. He will coordinate and supervise any FPM second-tier subcontractors, will prepare site activity reports, will provide RAB meeting support and will ensure that remediation goals are achieved. His duties include:

- Assigning onsite resources as necessary to ensure exact compliance with the approved SOW, approved PMP, SSHP, QC Plan and federal, state, and local laws and regulations
- Stopping work if performance is not in compliance with SSHP, PWS, QC Plan, and federal, state, and local regulations
- Approving selection of FPM sampling personnel
- Approving selection of FPM analytical laboratories.

2.9 AECOM Task Manager

The Task Manager for AECOM is Mike Niederreither, Professional Geologist (PG). Mr. Niederreither has 26 years of environmental engineering and management experience within New York, including 19 years at GRIFFISS. He will communicate weekly with the CAPE PM, will provide monthly reports, schedule updates and invoices to the CAPE PM, and may communicate with AFCEC and regulators upon agreement with the CAPE PM. He will coordinate and supervise any AECOM second-tier subcontractors, prepare site activity reports, provide RAB meeting support, and ensure that remediation goals are achieved. Mr. Niederreither's duties include:

- Assigning onsite resources as necessary to ensure exact compliance with the approved SOW, approved PMP, SSHP, QC Plan, and federal, state, and local laws and regulations
- Stopping work if performance is not in compliance with SSHP, SOW, QC Plan, and federal, state, and local regulations
- Approving selection of AECOM sampling personnel
- Approving selection of AECOM analytical laboratories.

Key individuals supporting AECOM efforts in support of this PBR Contract are Geologists John Santacroce and Greta White.

2.10 Senior Remediation Engineer

The Senior Remediation Engineer is Dan Servetas of AECOM. Mr. Servetas will serve as the AECOM Technical Lead, coordinating AECOM's internal resources such as the NYSDEC Regulatory Specialist, Process Optimization Specialist, Remediation Specialist, Stream and Sediment Specialist, and Sustainability Specialist, to ensure they are fully engaged with the holistic goal of bringing sites to closure. He will lead the brainstorming session with internal subject experts, assure all process engineering goals are achieved, provide negotiation assistance with regulatory agencies, and assure that all geology and groundwater-related goals, including field investigations, are achieved. Mr. Servetas is responsible for all drilling, sampling, and monitoring well installation activities to assure the goals of the field investigation are attained. His duties include:

- Scheduling a weekly conference call with internal subject experts
- Directing efforts of staff assigned to process engineering tasks
- Directing efforts of staff assigned to geology and groundwater-related tasks
- Stopping work for drilling operations if not in compliance with the PMP
- Overseeing data validation and Environmental Resources Program Information Management System (ERPIMS) data deliverables.

2.11 Senior Environmental Scientist

The Senior Environmental Scientist is Dan Baldyga, Certified Ecologist (CE) with FPM. Mr. Baldyga currently participates in the LTM Program at GRIFFISS. He will serve as the FPM Technical Lead, coordinate FPM field staff, assist and represent the SHM on site, and serve as the POC for onsite emergency situations. Mr. Baldyga will supervise field sampling, supervise O&M activities, and conduct LUC/IC inspections. He will summarize sampling data and update the sampling database, prepare Status and Completion Reports, oversee development of the Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP), and provide negotiation assistance with regulatory agencies. Mr. Baldyga's duties include:

- Establishing regulatory and hazardous materials management standard operating procedures (SOPs) and ensuring compliance with SOPs
- Approving and signing permit applications
- Obtaining permits with concurrence of the CAPE PM
- Stopping work that is not in compliance with applicable regulations

- Directing efforts of assigned field staff

- Overseeing data validation and ERPIMS deliverables.

3.0 TECHNICAL APPROACH

This section presents the original and updated performance objective and original proposed and current technical approach for each site. Each site is briefly described in Table 3-1. Sites are discussed in detail in the Site Specific Tables found in Appendix B.

The Air Force has four possible performance objectives that can be achieved for each site. The CAPE Team's proposed performance objective for each site is shown in Table 3-1. The performance objectives are:

- Site Closure with Unrestricted Reuse (i.e., no remaining Air Force financial liabilities)

- Site Closure with Restrictions (i.e., LUC/ICs), for sites where the restrictions are consistent with future land use, and achieving site closure with unrestricted reuse is not technically feasible or cost effective

- Optimized Exit Strategy

- Status Quo.

CAPE recognizes that changes to the technical approach may occur over the course of the project. These revisions will be discussed with AFCEC/CIBE and upon concurrence, will be documented within the PMP as a revision. The PMP Revision Summary is found in Appendix A. Revisions to the PMP are revisions needed to address revised objectives outlined in Contract Modification 2. Contract Mod 2, which was awarded on August 29, 2012, tasked CAPE to revise the objectives for nine of the CERCLA sites from status quo to achievement of unrestricted closure by the end date of this contract in 2015. These sites are: ST006-Building 101-UST (Yellow Sub) Battery Acid Disposal Cell, DP012-Building 301, DP013-Building 255, DP015-Building 219 Drywell, SS024-Fire Demo Area, FT030-Fire Training Area, SD050-Building 214 and AOI 72-Mobile Avenue Former Drum Storage Area and DW-211-01-Building 211 Drywell.

On July 8, 2013, Contract Modification 3 was awarded to implement Option 2 activities at site ST006. These activities included the installation and operation of a remediation system in October 2013. The site has a targeted closure date of December 31, 2015.

Table 3-1. GRIFFISS PBR Sites (*Column 1: Site # with diagonal slash indicates pending regulatory closure. Site # with crossed lines indicates site that has received regulatory closure status)*

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
CERCLA Sites								
1	LF001	Landfill 1	Engineered RCRA Cap landfill LTM (inspection, maintenance, landfill gas and ground/surface water monitoring), LUC/IC monitoring, and Five-Year Reviews	Optimized Exit Strategy	Optimization of groundwater and surface water sampling network using Monitoring and Remediation Optimization Systems (MAROS) and data evaluation. Optimization of landfill gas monitoring networks, and Landfill operations and maintenance network.	2040	2040	1. Sample surface water and groundwater every 5 years until 2040 for landfill leachate indicators. 2. Automated perimeter landfill gas monitoring until 2040. 3. Annual landfill cover maintenance until 2040.
2	LF002	Landfills 2 & 3	Engineered RCRA Cap landfill LTM (inspection, maintenance, landfill gas and ground/surface water monitoring), LUC/IC monitoring, and Five-Year Reviews	Optimized Exit Strategy	Optimization of groundwater and surface water sampling network using MAROS and data evaluation. Optimization of landfill gas monitoring networks, and Landfill operations and maintenance network.	2040	2040	1. Sample surface water and groundwater every 5 years until 2040 for landfill leachate indicators. 2. Automated perimeter landfill gas monitoring until 2040. 3. Annual landfill cover maintenance until 2040.
3	LF003	Landfill 7	Soil/Veg Cap landfill LTM (inspection, maintenance, and ground/surface water monitoring), LUC/IC monitoring, and Five-Year Reviews	Optimized Exit Strategy	Optimization of groundwater and surface water sampling network using MAROS and data evaluation. Optimization of landfill gas monitoring networks, and Landfill operations and maintenance network.	2040	2040	1. Sample surface water and groundwater every 5 years until 2040 for metals. 2. Annual landfill cover maintenance until 2040.
4	LF007	Landfill 5	Soil/Vegetation Cap landfill LTM (inspection, maintenance, and ground/surface water monitoring), LUC/IC monitoring, and Five-Year Review	Optimized Exit Strategy	Optimization of groundwater and surface water sampling network using MAROS and data evaluation. Optimization of landfill gas monitoring networks, and Landfill operations and maintenance network.	2040	2040	1. Sample surface water and groundwater every 5 years until 2040 for metals. 2. Annual landfill cover maintenance until 2040.
5	LF009	Landfill 6	Engineered Cap landfill LTM (inspection, maintenance, landfill gas and ground/surface water monitoring), LUC/IC monitoring, and Five-Year Review	Optimized Exit Strategy	Optimization of groundwater and surface water sampling network using MAROS and data evaluation. Optimization of landfill gas monitoring networks, and Landfill operations and maintenance network.	2040	2040	1. Biennial surface water and groundwater sampling until 2020 and every 5 years until 2040 for landfill leachate indicators 2. Automated perimeter landfill gas monitoring until 2040. 3. Annual landfill cover maintenance until 2040.
~~6~~	SD031	Three Mile Creek	a) Surface water, sediment and fish tissue sampling b) Five-Year Review	Site Closure with Unrestricted Reuse	Annual sediment sampling to confirm the stabilization/decreasing trends of sediment contamination and confirm that polychlorinated biphenyl (PCB) concentrations are below 1 part per million (ppm).Discontinue surface water sampling. Sample fish tissue sampling in 2012 to confirm downward trend of fish tissue contaminant levels since RI. RACR finalized on 1/10/13 as additional report to support closure report and request in late 2012.	2015	2014	Site closure approval received 9/2/14.
~~7~~	SD032	Six Mile Creek [includes Lagoon at Weapons Storage Area (WSA)]	a) Surface water, sediment and fish tissue sampling b) Five-Year Review	Site Closure with Unrestricted Reuse	Annual sediment sampling at downstream sampling locations Six Mile Creek (SMC)-4 and SMC-5 to confirm the stabilization/decreasing trends of sediment contamination. Surface water sampling will be conducted at SMC-1, SMC-4, and SMC-5 until the AOC-9 remedy is in place. Once the remedy is in place, surface water sampling will continue under the Apron 2 LTM network to evaluate surface water contamination associated with the Apron 2 petroleum spill site. Sample fish tissue sampling in 2013 to confirm the decreasing trend of fish tissue contaminant levels. RACR finalized on 1/10/13 as additional report to support closure report and request in late 2012.	2015	2014	Site closure approval received 9/2/14.
8	SD052	Soil Vapor Intrusion	a) Operate/Maintain systems b) Five-Year Review	Optimized Exit Strategy	O&M of the SVI systems in addition to system optimization.	2020	2020	It is anticipated that the number of sampling locations in each building will be decreased as SVI is mitigated at each site. Given the planned active SVI systems, it is also anticipated that the 2015 Five-Year review could

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
		System	*Note: Pending Proposed Plans and RODs for Buildings 774, 776, 785, and 786 completed by the Air Force (AF).*		Semiannual indoor air VOC sampling at four locations and outdoor air VOC sampling at one location will be performed at each building. One sub-slab vapor VOC sample will be collected at each building every five years. System optimization will be conducted as monitoring data is evaluated.			support a strategy to cease the AF's responsibility towards mitigating potential SVIs by the 2020 Five-Year Review. Team member FPM has transitioned O&M and quarterly reporting activities to the PBR contract in November 2012. Quarterly sampling and reporting continue as scheduled.
9	SS060	STW-1300 (Bldg. 35/36)	a) Groundwater monitoring b) Five-Year Review c) LUC/IC monitoring	Site Closure with Restrictions	Newman Zone Vegetable oil emulsion injection. Two annual (spring round) groundwater monitoring events at monitoring well B035MW-4 for VOCs. Site closure with soil restrictions was planned following the 2012 sampling event. Additional Newman Zone injection performed in December 2012. Follow-up sampling completed in June 2013. Analytical results supported initiation of the Closure Report.	2012	2014	Site closure approval received 9/9/14.
CERCLA Sites (LUC/IC Monitoring and Five-Year Review Only) Includes Mod 02 Sites That are now Targeted for Closures								
10	ST006 (Mod 2)	Building 101 – UST (Yellow Sub Battery Acid Disposal)	LUC/IC monitoring and Five-Year Review *Note: Proposed Plan and ROD completed by the AF.*	Original objective was Status Quo. Mod 2 received in late 2012 revised objective to Site Closure with Unrestricted Reuse	Annual LUC/IC site inspections given the pending ROD status. The proposed approach includes implementing the remedy proposed by the pending ROD while eliminating the underlying LUC/IC driver. A comprehensive soil vapor sampling program will be conducted to identify the extent of the residual contamination. The data will be relied upon to update the SVI evaluation, evaluate the site-specific risk, and implement a soil vapor extraction (SVE) system that is capable of eliminating any residual soil vapor. AROD Amendment or Explanation of Significant Differences (ESD) to achieve site closure will be supported by CAPE.	2040	2015	Revised objective to achieve unrestricted site closure by end of 2015. Remediation equipment installed in in October 2013. System is fully operational. SVI Evaluation Report completed 9/4/13. Quarterly sampling and reporting has been initiated. Quarterly reports for Quarter 1 and 2 have been finalized. Quarterly reports for Quarter 3 and 4 are in review.
11	SS008	Building /112-PCB Dump Area/South Side-PCB Trans Leak, Roof (Former SS-19)	LUC/IC Monitoring and Five-Year Review	Status Quo	Annual LUC/IC site inspections as PCBs exist at the site above unrestricted-use values.	2040	2040	Annual LUC/IC site inspections and reporting
12	DP011	Building 3 Drywell	LUC/IC Monitoring and Five-Year Review	Site Closure with Unrestricted Reuse	Conduct additional soil sampling and groundwater sampling at existing monitoring well, 3VMW-1. Based on anticipated results, remove LUC/ICs at the site.	2012	2013	Draft Final Closure Report submitted to NYSDEC and EPA on 5/24/12. Final Closure Report submitted to NYSDEC and EPA on 1/15/13. Site closure with no restrictions was approved by EPA on 6/18/13.
13	DP012 (Mod 2)	Building 301, Former Entomology Shop Drywell	LUC/IC Monitoring and Five-Year Review	Original objective was Status Quo. Mod 2 received in late 2012 revised objective to Site Closure with Unrestricted Reuse	Confirmation of the presence/absence of the drywell and to conduct additional soil sampling within the LUC/IC site boundary. If present, the drywell and any associated contaminated soil will be removed. Support the necessary ROD Amendments/ESDs to close the site.	2040	2015	Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 6/12/12 and NYSDEC approval received on 6/6/12.Site Investigation completed and report submitted as final on 12/11/13. Draft Closure Report submitted to NYSDEC and EPA on 10/17/14. The Final Site Closure Report was submitted 12/12/14. Additional comments received on 1/9/15 from DOH via NYSDEC. Responses to comments sent 1/20/15. Per 1/21/15 meeting NYSDEC was to communicate our responses to comments to NYSDOH. Anticipate closure approval in second quarter 2015.
14	DP013 (Mod 2)	Building 255, Two Drywells	LUC/IC Monitoring and Five-Year Review	Original objective was Status Quo. Mod 2 received in late 2012revised objective to Site Closure with Unrestricted Reuse	Confirmation of the presence/absence of the drywells at this site and to conduct additional soil sampling with the LUC/IC site boundary. If present, the dry wells and any associated contaminated soil will be removed. Support the necessary ROD Amendments/ESDs to close the site.	2040	2015	Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12 Annual LUC/IC Inspections & Reporting will continue until closure objective is met which is estimated by 2015. SI Report and Closure Report combined and submitted as final on 4/28/14.. Received email with comments from DOH via NYSDEC on 5/8/14 regarding chromium concentrations in soil results. Recommended sampling surface soils and 0-2 foot bgs interval. RTCs sent 7/11/14. Additional soil samples collected on 5/21/14. The Revised Final Site Closure Report submitted for NYSDEC and EPA review on 10/10/14. Final review comment period technically ended on 11/10/14. Additional comments received on 1/9/15 from DOH via NYSDEC. Responses to comments sent 1/20/15. Per 1/21/15 meeting with Regulators NYSDEC was to communicate our responses to

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
								reviewers at NYSDOH. FPM provided via email on 1/21/15 the ROD for this site. Site closure approval is anticipated in the second quarter of 2015.
15	DP015 (Mod 2)	Building 219, Drywell	LUC/IC Monitoring and Five-Year Review	Original objective was Status Quo. Mod 2 received in late 2012 revised objective to Site Closure with Unrestricted Reuse	Confirmation of the presence/absence of the drywell and to conduct additional soil sampling with the LUC/IC site boundary. If present, the drywell and any associated contaminated soil will be removed. Support the necessary ROD Amendments/ESDs to close the site.	2040	2015	Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12. Annual LUC/IC Inspections & Reporting will continue until closure objective is met. Final Closure Report submitted on 10-18-13 to NYSDEC and EPA. Closure approval was expected in QTR 3 2014. Need concurrence from NYSDOH and closure letters. Received review comments from NYSDOH via NYSDEC late on 6/9/14. RTCs sent to NYSDEC on 7/11/14. Additional soil samples collected from 0-2 ft bgs interval on 7/9/14. The Revised Final Site Closure Report was submitted for NYSDEC and EPA review on 11/6/14. EPA and NYSDEC review comments were to be returned by 12/6/14. All data collected supports closure. Still waiting on comments but expect that we can obtain site closure by close of first quarter 2015. (March 2015)
16	SS017	Lot 69 – Former Hazardous Waste Storage Area	LUC/IC Monitoring and Five-Year Review	Optimized Exit Strategy	Conduct annual LUC/IC site inspections and recommend the deletion of the groundwater restriction at the site.	2040	2040	Annual LUC/IC site inspections and reporting. Groundwater restriction deletion request made 3/1/12. EPA approval received on 6/7/12 and NYSDEC approval received on 4/24/12.
17	DP022	Building 222 – Battery Acid Disposal Pit	LUC/IC Monitoring and Five-Year Review	Optimized Exit Strategy	Conduct annual LUC/IC site inspections and recommend the deletion of the groundwater restriction at the site.	2040	2040	Annual LUC/IC site inspections and reporting. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12.
18	SS023	Building 20 Locomotive Round House – Contaminated Soil	LUC/IC Monitoring and Five-Year Review	Site Closure with Unrestricted Reuse	Prepare an Explanation of Significant Differences (ESD) to delete the groundwater restrictions, based on the last groundwater sampling data and the acceptance of no further sampling at the site. Based on previous excavation endpoint sampling results, no chemicals of concern (COCs) exceeded unrestricted values. Therefore, additional soil samples were collected to confirm the absence of contamination above unrestricted values.	2012	2013	Final Closure Report submitted March 6, 2012. EPA approval of closure report received via email on 2/12/13. NYSDEC provided formal closure concurrence in 6/18/13 letter.
19	SS024 (Mod 2)	Fire Demo Area – Contaminated Soil	LUC/IC Monitoring and Five-Year Review	Original objective was Status Quo. Mod 2 received in late 2012 revised objective to Site Closure with Unrestricted Reuse	Conduct a soil investigation and excavation at the site. In addition, we will request removal of the groundwater restriction at the site. Support the necessary ROD Amendment/ESD to close the site.	2040	2015	Revised per 9/12 Contract Mod to change site goal to site closure by 2015 with unrestricted reuse. Annual LUC/IC Inspections & Reporting will continue until closure objective is met which is estimated by 2015. SI Report submitted for Regulatory review on 3/31/14. Received email with late comments from NYSDOH via NYSDEC on 5/8/14 regarding pesticide Dieldrin concentrations in soil and groundwater results. RTCs sent to NYSDEC on 7/11/14. 8 additional soil samples were collected on 6/13/14 and submitted for pesticide analysis. The revised Sites Closure Report was submitted for NYSDEC and EPA review on 11/4/14. Additional data and RA evaluation supported closure. Expect site closure approval by close of first quarter 2015. (March 2015) .
20	SS025	T-9 Storage Area – Contaminated Soil / Groundwater	LUC/IC Monitoring and Five-Year Review	Optimized Exit Strategy	Conduct annual LUC/IC site inspections and recommend the deletion of the groundwater restriction at the site.	2040	2040	Annual LUC/IC site inspections and reporting. Groundwater restriction deletion request made 3/1/12. EPA approval received on 2/12/13 and NYSDEC approval received on 6/6/12.
21	FT030 (Mod 2)	Fire Training Area	LUC/IC monitoring and Five-Year Review	Original objective was Status Quo. Mod 2 received in late 2012 revised objective to Site Closure with Unrestricted Reuse	Conduct an SVI evaluation and a Human Health Risk Assessment at the site. We will also support the necessary ROD Amendment/ESD to close the site.	2040	2015	Revised per 9/12 Contract Mod to change site goal to site closure by 2015 with unrestricted reuse. Annual LUC/IC Inspections &Reporting until closure goal will continue until closure objective is met. Final Closure Report submitted to NYSDEC and EPA on 9/4/13. Recent history of site is that a site closure approval was received from NYSDEC on 3/17/14. EPA concurrence has been pending since this date. In support of gaining EPA concurrence additional site background information was sent to EPA on 6/20/14. Conference call completed on 11/12/14 with EPA Risk assessment personnel, EPA PM, and NYSDEC PM to review site. Path forward decided was to resubmit Site Closure Report incorporating risk assessors comments. Revised report submitted 1/21/15. Expect closure approval by close of first quarter 2015. (March 31, 2015).
22	SS033	Coal Storage Area – PCB Contamination	LUC/IC monitoring and Five-Year Review *Note: Proposed Plan and ROD completed by the AF.*	Status Quo	Conduct annual LUC/IC site inspections. PCBs exist at the site above unrestricted use values.	2040	2040	Annual LUC/IC site inspections and reporting.
23	ST036	Building 110, Aqua System –	LUC/IC monitoring and Five-Year Review	Status Quo	Conduct annual LUC/IC site inspections. SVI LUC/ICs	2040	2040	Annual LUC/IC site inspections and reporting.

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
		Remove USTs, Piping & Building 110 Free Product	*Note: Proposed Plan and ROD completed by the AF.*					
24	SS044	Substation, Electrical Power – PCB Site	LUC/IC Monitoring and Five-Year Review	Status Quo	Conduct annual LUC/IC site inspections. PCBs exist at the site above unrestricted use values.	2040	2040	Annual LUC/IC site inspections and reporting.
25	SD050 (Mod 2)	Building 214; Former Vehicle Maintenance Shop – Oil/Water Separator (OWS)	LUC/IC Monitoring and Five-Year Review	Original objective: Status Quo. Mod 2 in late 2012 revised objective to unrestricted Site Closure	Conduct additional soil sampling and excavation within the LUC/IC site boundary. Support the necessary ROD Amendment/ESD to close the site.	2040	2015	Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12. Annual LUC/IC Inspections& Reporting will continue until closure objective is met. Final Closure Report submitted to NYSDEC and EPA on 10/18/13Additional soil samples were collected from 0-2 ft bgs interval on 7/9/14 per NYSDOH request. The Revised Final Site Closure Report was submitted for NYSDEC and EPA review on 11/6/14. Waiting for comments or approval. All data collected supported closure. It is anticipated that site closure approval will be received by the close of the first quarter 2015 (March 2015).
26	SD52-01	Apron 2 Chlorinated Plume	LUC/IC Monitoring and Five-Year Review *Note: Current remediation activities are being performed under a USACE PBR through FY16*	Status Quo	Conduct annual LUC/IC site inspections. The remedy is under evaluation.	2040	2040	Annual LUC/IC site inspections and reporting.
27	SD52-02	Building 775 Chlorinated Plume	LUC/IC Monitoring and Five-Year Review *Note: Current remediation activities are being performed under a USACE PBR through FY16*	Status Quo	Conduct annual LUC/IC site inspections. The remedy is under evaluation.	2040	2040	Annual LUC/IC site inspections and reporting.
28	SD52-04	Landfill 6 Chlorinated Plume	LUC/IC Monitoring and Five-Year Review *Note: Current remediation activities are being performed under a USACE PBR through FY16*	Status Quo	Conduct annual LUC/IC site inspections. The remedy is under evaluation.	2040	2040	Annual LUC/IC site inspections and reporting.
29	SD52-05	Building 817 Chlorinated Plume	LUC/IC Monitoring and Five-Year Review *Note: Current remediation activities are being performed under a USACE PBR through FY16*	Status Quo	Conduct annual LUC/IC site inspections. The remedy is under evaluation.	2040	2040	Annual LUC/IC site inspections and reporting.
30	ST053	Building 133 – Underground Concrete Vault	LUC/IC monitoring and Five-Year Review *Note: Proposed Plan and ROD completed by the AFF*	Site Closure with Unrestricted Reuse	The recommended remedy is No Further Action.	2011	2011	Site closure status achieved in November 2011 with execution NFA ROD. No activities required.
31	SS062	AOC 9 Weapons Storage Area Landfill Chlorinated Plume	LUC/IC Monitoring and Five-Year Review *Note: Current remediation activities are being performed under a USACE PBR through FY16.*	Status Quo	Conduct annual LUC/IC site inspections. The remedy is under evaluation.	2040	2040	Annual LUC/IC site inspections and reporting through 2015.
Petroleum Sites								

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
32	SD041	Building 782, Nose Dock #1 – Oil Water Separator	a) Operate and maintain a biosparging system and a bioventing system b) Groundwater monitoring, c) LUC/IC monitoring and Five-Year Review *Note: Although closed under NYSDEC Spills Program, the AF has agreed to include this site in Proposed Plan, ROD, and Five-Year Reviews. Proposed Plan and ROD completed by the AF.*	Site Closure with Unrestricted Reuse.	2 consecutive GW events showed concentrations below standards. Continued monitoring of GW supported closure.	2012	2013	Site closure pending. Closure report submitted 11/11 to NYSDEC. Additional soil data collected February 2013. Closure Report Addendum in preparation and will be submitted for NYSDEC review in March 2015. NYSDEC approval anticipated by close of the second quarter 2015 (June 2015).
33	SS054	Building 781, Pumphouse – Free Product on Groundwater	a) Operate and maintain a biosparging system b) Groundwater monitoring c) LUC/IC Monitoring	Optimized Exit Strategy	Optimize the existing biosparge system, focusing on free product recovery. Enhance the existing system by installing a bioventing and targeting free product with a mobile bioslurping system.	2018	2018	1. Continue operating biosparge system to reduce dissolved plume below remedial goals 2. Continue groundwater monitoring of 4 well quarterly and 18 wells on an annual basis for VOCs. Optimization of existing systems and installation of additional biosparge wells completed in 2011.
34	SS020	Tank Farm 1 & 3 – Contamination	a) ORC compound b) Groundwater treatment and long-term monitoring c) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Continue operating the existing biosparge system. Adapt system to operate based on the concentrations detected. Enhance in problem areas with oxidant, if required. Continue to monitor GW until concentrations are below maximum contaminant levels (MCLs) for 4 quarters to achieve closure.	2015	2015	Optimization of existing systems and installation of additional biosparge wells completed in 2011. Optimization efforts were successful and Closure Report submitted as draft on July 30, 2013. NYSDEC approved closure request on September 24, 2013.
35	SS063	Apron 1 (NYSDEC Spill #9707954)	a) Operation and maintenance of Biosparging and Bioventing System, Soil Vapor/Air monitoring b) Groundwater Monitoring c) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Continue monitoring progress in GW. If areas of impact remain, use the existing biosparge system with targeted vertical wells and nutrient additions to complete the remediation. Continue to monitor GW until concentrations are below MCLs for 4 quarters to achieve closure.	2013	2014	In early 2012 NYSDEC requested additional historical site information in support of their evaluation of the site. Based on their subsequent review and request additional soil samples were collected at the site. An additional Geoprobe investigation was completed in January 2014 to obtain the requested additional soils data and better delineate the extent of subsurface contamination. A Site Closure Report was submitted for AFCEC review on December 15, 2014. Review comments were received January 23, 2015 The draft report is in preparation and is anticipated to be submitted for NYSDEC review on February 27, 2015. Closure is expected in the second quarter of 2015.
36	ST037	Building 771, Pumphouse 5 – Free Product on Groundwater – Petroleum	LUC/IC Monitoring *ROD completed by the AF. Consolidated as part of the Proposed Plan and ROD for SS033.*	Site Closure with Unrestricted Reuse.	The site is included in the Coal Storage Yard Area Operable Unit Record of Decision which is pending. The recommended remedy is No further action. The Final Proposed Plan is pending public comment.	2011	2012	Site closure approval received from NYSDEC Spills Group on 4/23/12. No Activities required
37	SS064	Apron 2 Type II Fuel System (NYSDEC Spill #9713631)	a) Operation and maintenance of Biosparging and Bioventing System, Soil Vapor/Air monitoring b) Groundwater Monitoring c) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Expand existing biosparge system to address problem areas and protect Six Mile Creek. Enhance system with nutrient addition. Target problem areas with new wells and a mobile biosparge unit. Continue to monitor GW until concentrations are below MCLs for 4 quarters to achieve closure.	2014	2014	The biosparging system has been shown to be very effective in reducing contaminant levels. It is presently planned to perform additional excavation at this site near Ellsworth Road in the winter and spring 2015 to address remaining NAPL found in this area of the site. Site closure is anticipated in mid- 2015.
38	SS065	Building 15 (NYSDEC Spill #9709366)	a) Groundwater monitoring b) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Optimize the existing vacuum extraction system by installing 3 injections wells and injecting PermeOx®Plus as an oxidant to remediate the site. Monitor GW following injection to achieve closure.	2015	2015	Persulfate injections have been successful in remediating this site. Closure Report submitted as Final to NYSDEC on 3/31/14. Closure letter received 1/8/14.
39	SS066	Building 786 Jet Fuel Pipeline (NYSDEC Spill #8910168)	a) Groundwater monitoring b) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	In March 2012 AFCEC directed CAPE to permanently cease all remediation activities that would create aerobic subsurface conditions at the site due to MNA remediation activities being performed under a separate contract for a chlorinated plume also associated with the site. Site closure approved 12/8/14	2015	2015	Site to be closed. CAPE will work with the NYSDEC Spills Group to achieve site closure considering that the remaining petroleum contaminants at the site are required as a carbon source for remediation of the chlorinated plume at the site. An excavation was completed for approximately 30 CYs of contaminated soil still located near the remaining impacted monitoring well in November 2013. The Site Closure Report was submitted for AFCEC review on December 15, 2014. Closure approval for SS066 was received on December 8, 2014 with a formal closure letter provided by NYSDEC on January 7, 2015.

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
40	SS067	Building 789 Type II Fuel System (NYSDEC Spill #9810713)	a) Operation and maintenance of Biosparging System, Soil Vapor/Air monitoring b) Groundwater monitoring c) LUC/IC Monitoring	Optimized Exit Strategy	Enhance the existing vacuum extraction system, including dewatering efforts, to increase the product recovery. Install 5 additional monitoring wells to better delineate the plume. Expand the existing biosparge system based on the new delineation to cover the edges of the dissolved plume. Include the addition of nutrients in the air stream to improve the efficiency. Continue to monitor the dissolved and free product plumes to evaluate effectiveness.	2018	2018	1. Continue operating biosparge system to reduce dissolved plume below remedial goals 2. Continue groundwater monitoring of 4 well quarterly and 18 wells on an annual basis for VOCs. Optimization and remediation system upgrades completed in 2011 with all components fully operational in May 2012
41	SS068	Building 7001 (NYSDEC Spill #9706957)	a) Groundwater monitoring b) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Continue operating existing biosparge and oxygen infusion systems and enhance with additional oxidant injections at 4 additional locations. Continue to monitor GW until concentrations are below MCLs for 4 quarters to achieve closure.	2015	2015	The internal draft Closure Report was submitted for AFCEC review on June 4, 2014. Review comments from AFCEC were received on July 8, 2014. The draft report was submitted for NYSDEC review on August 20, 2014. Site closure approval via an email was received on December 8, 2014. A formal closure letter was received on January 7, 2015.
42	SS069	Bulk Fuel Storage Area (NYSDEC Spill #9507364, 9810949, 0009824	a) Operation and maintenance of Biosparging System, Soil Vapor/Air Monitoring b) Groundwater Monitoring c) LUC/IC Monitoring	Site Closure with Unrestricted Reuse.	Continue operating existing biosparge system and enhance with vacuum-enhanced GW extraction with oxidant application. Continue to monitor GW until concentrations are below MCLs for 4 quarters to achieve closure.	2014	2013	Site closure granted by NYSDEC Spills Group on 5/1/13.
43	SS070	Building 150 (NYSDEC Spill #0800273)	a) Groundwater monitoring b) LUC/IC Monitoring	Site Closure with Unrestricted Reuse	The closure of NYSDEC Petroleum Spill number 0800273 has been recommended. Since site contaminant levels are low, monitored natural attenuation will support spill closure if it is not obtained as a result of the 2009 groundwater monitoring data. Additional round of GW monitoring will be performed as a contingency if closure request is not accepted.	2011	2013	Site closure granted from NYSDEC Spills Group on 2/11/13. No Activities required
44	AOI-72	Mobile Ave–Former Drum Storage Area in Parcel F9	AOI 72 did not require a ROD as the site was closed during the Preliminary Assessment (PA) / Supplemental Investigation (SI) period. The LUC/IC for this site was set in place during property transfer as a deed restriction.	Mod 2: Site Closure with Unrestricted Reuse. Original objective was status quo with LUC/IC inspections and reporting	Conduct soil sampling to confirm the nature and type of residual contamination at locations where contamination was previously identified. Conduct excavation of residual soil contamination to residential use SCOs.	2015	2015	Site to be closed. Site investigation report submitted for Regulatory review on September 23, 2013. Closure Report in progress with a draft submittal date anticipated in August 2014. Closure approval anticipated in early 2015.
45	NA	Building 211 Drywell	A ROD was not required because it was part of the AOI group and was closed during the PA/SI investigation period. LUC/ICs at the site were implemented through deed restrictions.	Mod 2: Site Closure with Unrestricted Reuse. Original objective was status quo with LUC/IC inspections and reporting	Conduct concrete sampling to support site closure.	2015	2015	Closure Report submitted to NYSDEC and EPA on 10/18/13. Expect closure in QTR 3 2014. Did receive request to conduct additional sediment sampling for Hg in subsurface vault which is scheduled for June 2014. Addendum to report will be prepared.
46	AOI-474	Unknown Site # 1			Site Investigation to determine contamination limits followed by Remedial Action and Remedial Action Completion Report and Closure Report.	NA	2015	Draft Site Closure Report submitted for NYSDEC and EPA review on 2/10/14. Completed site restoration activities in May 2014. Received email with comments from NYSDOH via NYSDEC on 5/8/14 regarding metals in groundwater. Site is believed to be confused with adjacent landfill site and COCs. RTCs submitted to NYSDEC on 7/11/14. Final Closure Report submitted on 7/17/14. Final review comments were due 8/18/14. DOH requested that GW samples be collected at a groundwater seep t the site. Samples were collected in November. Revised Final Site Closure Report was submitted on January 16, 2015. Expect site closure approval in early 2015.

Site #	Site ID	Site Name	Existing Site Status	Performance Objective	Technical Approach	Original Projected Closure Date	Anticipated Closure Date	Post POP Milestones/Activities/Comments
47	Building 785 Pipeline	Unknown Site # 2			Site closure activities performed at SS066-Building 786 site resulted in the identification of a new area of contamination at the Building 785 pipeline. Site will be investigated under resources allocated under Unknown Sites Task.	NA	NA	An investigation was authorized by AFCEC and results indicate that this site would need to be reported as a new spill site. The work plan for this investigation was approved by AFCEC on September 9, 2014 and the Work Plan submitted for NYSDEC Spills Group review. No comments were or will be received per NYSDEC. The site investigation was completed and the Site Investigation and Remedial Action Plan was submitted for AFCEC review on December 12, 2014. Review comments were received from AFCEC and the report is presently under revision and scheduled for submittal to NYSDEC by late February 2015.

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3.1 PBR Transition

The CAPE Team continues to work effectively to keep the project on schedule and maintain compliance. The CAPE Team has longstanding existing relationships with AFCEC, the former Air Force Real Property Agency (AFRPA), and NYSDEC and EPA regulators which supported a seamless transition to the new contract. This was exemplified by the transition of the O&M and quarterly reporting activities for SVI systems at SD052, which had been completed as part of the Remedial Action Construction Soil Vapor Intrusion project under a separate contract (FA8903-04-D-8687/0017). This contract continued through November 2011, after which time the SVI operation and maintenance and associated quarterly reporting in place at four buildings were assumed under this contract.

3.2 Technical Support

The CAPE Team will provide technical support to AFCEC and GRIFFISS, in accordance with the PWS, including the following activities:

- Attending RAB meetings and preparing RAB meeting minutes
- Supporting regulatory meetings of the BRAC Cleanup Team, developing presentations and preparing meeting minutes as required
- Attending other public meetings and preparing meeting minutes as required
- Supporting community involvement activities as required
- Preparing and submitting annual LUC/IC documents
- Providing LUC/IC assistance to ensure property owner activities do not impact remediation efforts (e.g., review of development plans)
- Providing timely response to applicable utility location request tickets
- Providing informal or formal dispute resolution or alternative dispute resolution support
- Providing GIS support to produce environmental property condition maps, tables, and other graphics as required
- Providing technical and documentation support for Air Force data calls, meetings, annual work cell events, real property-related actions, etc.

4.0 PROJECT SCHEDULE

The Base TO activities POP, including administrative requirements for closeout, expires on December 22, 2015. All actions required to meet the objectives of this TO are presently on track to be accomplished by that date. The primary concern to date with meeting project milestones has been the failure of NYSDEC and EPA Region 2 to complete reviews of submitted deliverables in accordance with established review periods. This concern has been raised throughout the contract period and has been discussed with AFCEC leadership during semiannual PBR Contract reviews. CAPE has been diligent in mitigating the impacts of these delayed reviews, but some milestones have still been delayed up to a year.

The major objective regarding the project schedule is to ensure proper planning has occurred in order to complete the project within the TO POP and to maintain compliance with the requirements of the PWS. The updated project schedule showing completions through May 2014 is presented in Figure 3. Contractor's Progress, Status and Management Reports (CPSMRs) will be issued by the third week of each month and will include document delivery schedule and minutes from the monthly team meetings and monthly meetings with NYSDEC CERCLA Group and EPA 2 representatives. The CPSMRs will include site status updates to facilitate review of specific performance objectives for each site.

5.0 MANAGEMENT APPROACH

The general management approach for this TO is described in this section. Project-specific performance objectives related to this DO are summarized below. In addition to the plans and reports discussed in this section, work conducted at the sites will require Work Plans and/or Documentation Reports.

5.1 Performance and Payment Milestones Completion

Performance and payment milestones for this TO are summarized below and presented with milestone completions as of January 2015 (Invoice 0011) in Appendix C. Current performance and payment milestones completed to date and forecasted milestones have also been updated on the performance payment milestone schedule as shown in the table in Appendix C. The individual performance and payment milestones discussed below are proposed for most sites.

Periodic reporting will evaluate performance and monitoring data utilizing statistical and/or graphical/tabular interpretation. The data analysis will be relied upon to make optimization, remediation, or site closure recommendations. Monthly and annual reports will be submitted as appropriate. From previous GRIFFISS experience, staggering submittal of performance and monitoring reports is preferred by the Government and the regulators, facilitating timely reviews.

As an outcome of stakeholder meetings completed on December 6, 2012 with AFCEC and the regulatory agencies, it was agreed that document reviews would be expedited by following a revised process. This process is that internal Working Draft documents would be submitted to AFCEC for review and comment with 30 calendar days scheduled for AFCEC internal reviews. Following AFCEC review, the draft-final version documents would be submitted to NYSDEC and EPA for review and comment. Forty-five (45) calendar days have been allotted for NYSDEC and EPA reviews. It had been standard procedure by CAPE to provide a letter to NYSDEC and/or EPA at the 30th calendar day of the 45-day review period as a reminder that reviews are to be completed in two weeks. This letter was on AFCEC letterhead and approved by the AFCEC COR before submittal. This process has been found not to be effective, and it was decided during the June 2013 onsite Semiannual Meeting that monthly meetings would be held with NYSDEC CERCLA and EPA Region 2 personnel, where a summary table of document submittals requiring their action and a forecast of upcoming document deliverables would be reviewed. This process has been more effective.

CAPE will continue to provide responses to comments (RTCs) within 14 calendar days from receipt of AFCEC and/or Regulatory Agency comments. Upon approval of the RTCs by respective reviewers CAPE will resubmit the document as Final, incorporating requested revisions. Once submitted, NYSDEC and EPA will have a final 30-calendar day period to provide comments. During this time period, the document will be included as part of the administrative record. If additional comments are received during this final 30-day review period they will be addressed following the same procedure as described above.

To greatest extent possible, documents will be submitted as groups, but individual documents within these groups will be submitted for closure, etc. when needed. In line with previous GRIFFISS submissions, the following types of sites will be grouped together:

- Landfills
- Three Mile and Six Mile Creeks
- Source Removal AOCs
- Petroleum Spill Sites
- SVI Sites
- Building 35 sites.

Reviews for the quarterly reports for operation and maintenance (O&M) for the ST006 remediation system as tasked under contract modification 3, option 2 as awarded on July 8, 2013 will require expedited reviews in order to meet POP requirements. Specific review times will be coordinated once quarterly reporting process is initiated. The remediation system was fully operational in October 2013, and the first quarterly report was submitted for internal review on May 7, 2014.

PMP: CAPE submitted the original internal draft PMP to AFCEC for review on February 9, 2011. This document was accepted as final on May 10, 2011. Annual Updates or in response to a significant contract modification will be submitted as required to address any management revisions needed to support the successful completion of this contract. It was originally planned that five updates may be required over the five-year period of performance. Invoices will be submitted for the PMP performance milestones when the PMP updates are approved by AFCEC.

UFP-QAPP and SSHP: The CAPE Team submitted the original internal draft SSHP for AFCEC review on April 18, 2011. The SSHP was approved as final on June 24, 2011. The internal draft of the UFP-QAPP was submitted for AFCEC review on April 23, 2011, and approved as Draft Final by AFCEC on June 24, 2011. Draft Final version of the UFP-QAPP was submitted to NYSDEC and EPA on August 3, 2011. These documents were approved as final on November 30, 2011. The submittal schedule for these documents was that the internal draft UFP-QAPP and SSHP would be submitted to AFCEC for review and comment. Following AFCEC review, the draft final UFP-QAPP would be submitted to the NYSDEC and the EPA for review. A courtesy copy of the SSHP was submitted as well and was not subject to regulatory review. Responses to regulatory comments on the UFP-QAPP, if received, would be addressed and the final document submitted within 14 calendar days of receipt of Government comments to the draft documents. After receiving approval from AFCEC, the EPA and the NYSDEC, CAPE would invoice for the UFP-QAPP and SSHP performance milestone in accordance with the proposed performance milestone and payment schedule.

UFP-QAPP and SSHP updates were scheduled to be updated annually. It was agreed in 2012 that if no revisions are required, a letter will be prepared and submitted to NYSDEC and EPA stating that the preceding UFP-QAPP and SSHP will be followed as no revisions to these documents were needed for the upcoming years scheduled activities. Invoices will be submitted for the PMP performance milestones when the UFP-QAPP and SSHP updates are approved.

With respect to data reporting and QA/QC procedures outlined in the UFP-QAPP the CAPE Team has a long history of providing data validation services at GRIFFISS and has a complete understanding of the data review and validation guidelines approved by AFCEC, EPA, and NYSDEC. Data reviews typically are not as in depth as data

validation and is a cursory review of the data. Data validation is a comprehensive review where instrument calibration, sample preparation activities, confirmation that data calculations were correctly performed by the lab, as well as a review of the chromatograms and raw data for all samples. Data review will be done on 100 percent of sample data, and data validation will be performed on 10 percent of the sample data. The data review will confirm that the criteria specified in the project-specific QAPP and method was met. If any corrective action or flagging criteria was needed, data review will verify that these actions were performed.

Annual Inspection and Repairs Reports: The CAPE Team will submit the internal draft annual site inspection and repairs reports as part of the annual LTM and inspection reports to AFCEC for review and comment. Inspections will document features such as monitoring wells, piping, remediation equipment and fencing. The reports will document inspection findings and any repairs conducted. Following AFCEC review, the draft final annual site inspection and repairs reports will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft final documents, and will submit final reports. Once approval from AFCEC, the EPA and the NYSDEC is received, CAPE will invoice for the Annual Inspection and Repairs Reports performance milestone in accordance with the proposed performance milestone and payment schedule.

Final Groundwater Monitoring and Reporting: The CAPE Team will submit the internal draft annual groundwater monitoring package to AFCEC for review and comment. The annual groundwater monitoring package will consist of the Data Quality Control Report, the annual groundwater monitoring report, data validation, and the required GIS as outlined in the AFRPA GeoBase Strategic Plan. The annual groundwater monitoring reports will include monitoring results, site conclusions and recommendations.

Following AFCEC review, the draft final annual groundwater monitoring package will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft documents, and will submit the final groundwater monitoring package. Once approval from AFCEC, the EPA and the NYSDEC is received, CAPE will invoice for the annual Final Groundwater Monitoring and Reporting performance milestone in accordance with the proposed performance milestone and payment schedule.

Annual LUC/IC Inspection Reports: The CAPE Team will submit the internal draft of the annual landfill LUC/IC inspection reports to AFCEC for review and comment. Following AFCEC review, the draft annual landfill LUC/IC inspection reports will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft documents, and will submit final reports. Once

approval from AFCEC, the EPA and the NYSDEC is received, CAPE will invoice for the Annual LUC/IC Inspection Reports performance milestone in accordance with the proposed performance milestone and payment schedule.

Five-Year Review Document: The CAPE Team will submit the internal draft of the Five-Year Review document to AFCEC in 2015 for review and comment. The Five-Year Review Document will include all the CERCLA sites, except for any sites that were closed prior to the 2010 Five-Year Review. Following AFCEC review, the draft Five-Year Review document will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft documents, and will submit final documents. After receiving approval from AFCEC, the EPA and the NYSDEC, CAPE will invoice for the Five-Year Review Document performance milestone in accordance with the proposed performance milestone and payment schedule. Presently the Five-Year Review Document is in progress and has undergone an internal review with AFCEC. It is planned to submit the draft document for Regulatory review in June 2015. The completion of the Five Year Review is required by September 2015.

Optimized Exit Strategy: The CAPE Team will submit the internal draft of the Optimized Exit Strategy Plan to AFCEC in 2015 for review and comment. The Optimized Exit Strategy Plan will include support for Project Cost Estimating Assumptions Documents for sites with objectives of status quo or optimized exit strategy. Following AFCEC review, the draft Optimized Exit Strategy Plan will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft documents, and will submit final documents. Once approval from AFCEC, the EPA and the NYSDEC is received, CAPE will invoice for the Optimized Exit Strategy Plan performance milestone in accordance with the proposed performance milestone and payment schedule.

Sites that are not closed will be evaluated for optimization opportunities throughout the POP. It is anticipated that optimization implementation will occur as early in the POP as practical.

Additional Performance Milestones: Additional performance and payment milestones are proposed for one or more sites, as shown in the Performance and Payment Milestones table in Appendix C. These milestones include Final Tissue and Sediment Sampling Reports, achieving Site Closure Unrestricted Reuse - 3 Mile Creek, achieving Site Closure Unrestricted Reuse - 6 Mile Creek, the SD031 Final Closure Report, Quarterly O&M Reports, Final Monitoring Well Abandonment Monitoring Reports, approval of LUC/IC Removal at sites, Design/Plan Remedy Optimization plans, Complete Supplemental Investigation Including Investigation Reports, Implement Remedy Optimization plans, Achieve Site Closure, Groundwater Monitoring Reports, Monitoring Well Abandonment Reports, and Site Investigation Reports. After receiving individual

approval from AFCEC, the EPA and the NYSDEC for these deliverables, CAPE will invoice for each individual performance milestone in accordance with the proposed performance milestone and payment schedule. It should be noted that Remedial Action Completion Reports (RACR) were completed for the Three Mile Creek and Six Mile Creek (SD31 and SD32) in support of site closure activities per request from EPA and NYSDEC.

Environmental Resources Program Information Management System **(*ERPIMS):*** ERPIMS submittals are now segregated per agreement with the AFCEC COR as quarterly performance payment milestones. ERPIMS uploads will be completed as batches of analytical data for the preceding quarters validated data packages used to support final report submittals. ERPIMS uploads will be completed by AECOM and FPM for their tasked sites. Documentation of successful uploads will be provided to AFCEC and included as backup as appropriate with invoices.

AFCEC Website Uploads: Similarly to ERPIMS uploads for laboratory analytical data, AFCEC website uploads were scheduled to be completed quarterly to upload final versions of site documents. AFCEC website uploads are now also segregated, per agreement with the AFCEC COR, as quarterly performance payment milestones. AFCEC Website uploads will be completed as batches of final reports for the preceding quarter. Documentation of successful uploads will be provided to AFCEC and included as backup as appropriate with invoices. Current AFCEC website upload instructions are were to use the Contractor Data Uploading Tool (CDUT) which is an electronic data delivery, storage, and retrieval system was used to standardize electronic delivery and document management for deliverables related to this AFCEC contract. Over the past year that has been repeated difficulties with the AFCEC website for uploading final deliverables. As a temporary remedy, CAPE has been providing, per AFCEC direction, CDs with PDF files of final documents to the Contracting Officer designee.

5.2 Site Optimization and Closure Plan

The CAPE Team has prepared (and will prepare as needed) Working Copy Site Optimization and Closure Plans for submittal to AFCEC for review and comment. The Site Optimization and Closure Plans outlined the path to the desired outcome at each of the 47 sites. The goal of each plan was to provide a pathway to reduce the Air Force's remediation footprint and ongoing liabilities at the site as quickly as possible by closing sites, optimizing sampling programs, and abandoning infrastructure such as monitoring wells when they are no longer needed in the monitoring program. Following AFCEC review, the draft Site Optimization and Closure Plans were or will be submitted to the NYSDEC and the EPA for review. CAPE will provide responses to regulatory comments to the draft documents, and will submit final plans. It is projected that only the five landfill sites (LF001, LF002, LF003, LF007, and LF009), SD052-SVI System, SS008-

Building 112, SS017- Lot 69, DP022-Building 222, SS025- T-9 Storage Area, SS033-Coal Storage Area, ST036-Building 110, SS044-Substation Electrical Power PCB Site, SD052-01 Apron 2 Chlorinated Plume, SD052-02-Building 775 Chlorinated Plume, SD052-04- Landfill 6 Chlorinated Plume, SD052-05-Building 817 Chlorinated Plume, SS062-AOC 9 Weapons Storage Area Chlorinated Plume, SS067-Building 789, and SS054-Building 781 sites will remain with optimized exit strategy or status quo objectives.

The Site Optimization and Closure Plans were organized such that the plan for each site will be presented in its own chapter that details the methods by which the outcome will be achieved, and describes potential contingencies that may be put in place if there is a deviation from the plan. These Plans also identified the exit strategy for each site and outlined the methods that would be used to evaluate performance towards that strategy.

The Site Optimization and Closure Plans identified site performance metrics to aid in site evaluations. Site specific schedules were included that were used to provide measurable parameters indicating that progress at each site is being achieved. The Plans will follow the requirements of Enclosure 6, "Performance Plan for Performance-Based Remediation (PBR) at Former Griffiss Air Force Base, New York FA8903-10-R-9999 R044 Dated 5OCT10" to aid in evaluation of site performance.

The Site Optimization and Closure Plans, once approved by NYSDEC and EPA, will provide protection to the Air Force in the event of regulator turnover by having a detailed plan in place and agreed to by all stakeholders. Milestones were included for this document for petroleum sites SS020, ST037, SD041, SS054, SS063, SS064, SS065, SS066, SS067, SS068, SS069 and SS070, referred to as a Design Plan Remedy Optimization. The milestone for CERCLA sites LF001, LF002, LF003, LF007, LF009, SD031, SD032, SD052 and SS060 is referred to as a Design and Remedy Optimization Document.

5.3 Communications

CAPE and our team members, AECOM and FPM, will continue to maintain high levels of communication. This has and will continue to result in the coordination and fostering of stakeholder partnering and will ensure that the appropriate resources are fully available to the project. The PM will promote constant communication among AFCEC, the CAPE Team, and regulatory stakeholders to achieve the project goals and proposed site closures proposed for the successful execution of this PBR Contract. Communication has been excellent throughout the first four years of this contract between CAPE, AECOM, FPM, and AFCEC. Responsiveness from NYSDEC and EPA Region 2 has been lacking with respect to providing reviews of documents within the established review time periods per the Federal Facilities Agreement (FFA). These communication issues with the regulatory stakeholders have been documented on several occasions. As indicated in Section 4,

CAPE has conducted monthly meetings since 2013 with NYSDEC CERCLA and EPA Region 2 personnel to review needed action by these agencies for submitted documents and to provide a forecast for upcoming document submittals. A summary table of document submittals requiring their action and a forecast of upcoming document deliverables is updated and provided each month. This process has been more effective, but review times are still short of FFA requirements. CAPE will continue to proactively communicate its needs to NYSDEC and EPA and seek their support in meeting contract objectives. CAPE believes all that can be done to improve better response from NYSDEC and EPA with respect to honoring established review periods for document submittals has been done. It is suggested that, in the future, AFCEC not pay government agencies upfront for review of document deliverables and make payments as a performance milestone, as done for performance-based contracts. That is, when a review is completed as scheduled, the government agency can invoice for this milestone.

The PM will continue to make his primary objective the achievement of a level of communication which is appropriate, efficient, and focused on project goals and agreed-upon initiatives. This approach was rolled out at the onset of the contract during the Kick-off Meeting with all stakeholders. At this time, all stakeholders agreed to communication protocols and meeting document review periods as established in the FFA. Communication protocols were designed to build trust and a commitment of cooperation among stakeholders while addressing the Air Force's need to close sites and reduce life-cycle costs.

Project Management Team: The first avenue of communication is between the project management team and AFCEC. This team consists of our PM, GMO, and FPM and AECOM TM's and other technical resources as necessary. This team will monitor and record progress toward site goals and compliance with regulatory, quality, and safety metrics. Project and site-specific goals are communicated among team members during our monthly meetings.

Program Management Team: The second avenue of communication is the AFCEC program management team. This team, located in San Antonio, Texas will ensure that CAPE is meeting all of AFCEC's contractual requirements and is available to respond immediately to AFCEC requests. CAPE's PGM, as discussed earlier in this section, will ensure that a proper flow of communication exists between the project management team and AFCEC.

Weekly Communication: CAPE Team members continue to hold weekly phone calls and/or emails to communicate progress made and activities planned at each site. These calls will continue, especially in the final year of the contract, to be critical in the early identification of any execution shortfalls so that corrective actions can be made before

these issues become a problem, and will ensure that required resources are available as needed to maintain schedules. Additional calls have been and will be held as needed.

Field Weekly Status Reports: During active field project activities, CAPE will notify the Contracting Officer Representative (COR) a week ahead of the scheduled field activity date and check in with him on the day of the scheduled activity prior to traveling to the site. Field activity updates will be provided at a during the monthly project status conference calls at a minimum or more frequently as needed. Status reports will include a planned look-ahead schedule for any subsequent work to be performed during the following week of work. The status report will also include a brief discussion of any problems encountered requiring resolution.

Monthly Conference Calls: Monthly conference calls will continue to be conducted with the CAPE Team and AFCEC to provide updates on project status and the milestone schedule. Communication will focus upon progress made toward achieving site goals while maintaining quality, safety, and compliance throughout the life of the contract. Monthly conference calls have been scheduled for the fourth Tuesday of each month at 10:00 AM Central Standard Time (CST). Minutes for these monthly meeting are prepared by the CAPE PM and distributed prior to the next monthly meeting for team for project team review.

In addition, monthly meetings have been scheduled on the fourth Thursday of each month with AFCEC, CAPE, FPM, NYSDEC, and EPA CERCLA representatives. These meetings are scheduled for 10:00 AM CST. Minutes for these monthly meeting are prepared by the CAPE PM and distributed prior to the next monthly meeting for team for project team review. Key participants on the monthly team calls are:

- Dave Farnsworth, AFCEC COR
- Sean Eldredge, AFCEC
- Brad Juneau
- Aldaberto Ramirez
- Philip Dula
- Mike Healy
- Terry Watkins
- John Santacroce
- Greta White
- Gaby Atik
- Dan Baldyga

Monthly Project Reports: Monthly project reports will be prepared and submitted to AFCEC by the third week of each month and address progress and issues noted during the preceding month. Monthly reports will include updates to the milestone schedule as

needed. The project schedule has been revised to focus on remaining active sites and activities for the final year of this contract and is attached as Appendix E of the 2015 PMP Update.

Semiannual Onsite Meetings: Semiannual onsite meetings will be held between the PM, TMs, AFCEC personnel, NYSDEC representatives, and EPA Region 2 representatives. One of the semiannual meetings will be scheduled to coincide with the Annual Restoration Advisory Board meeting held in the fourth quarter of each year.

Written Correspondence: All written correspondence pertaining to this TO will be addressed to the COR unless otherwise directed by the Contracting Officer (CO) or COR. Questions and requests for information will be directed to the COR or PM. TO submittals (e.g., work plans and reports) will be made to the TM. Written directions or clarifications to the PWS will only be provided by the CO.

Community Relations: Issues relating to public relations will be resolved in a timely manner to the satisfaction of the Government. CAPE will not converse with the public on issues relating to the PWS without the prior approval of the Government. Direction from AFCEC in March 2013 regarding public relations and dealing with the media is as follows:

"It is important to respond to media inquiries in a timely manner, but what's equally important, if not more so, is making sure the information provided is accurate, properly vetted and releasable. That's where public affairs (PA) can help.

What to do if approached by the media…

Record as much of the reporter's information as possible, including the reporter's name, phone number, email address, the name of his or her organization and deadline for a response.

Reach out to the BEC at your installation and let him or her know of the inquiry so he/she can help you get in touch with PA.

Contact AFCEC Public Affairs at 210-925-0956 or AFCEC.PA@us.af.mil to let PA know about the media interest. Provide the reporter's information, the name of the base and their areas of interest so PA can follow up with appropriate experts."

Contracts Office Communication:

CAPE will maintain active communication with the AFCEC Contracting Officer and their designated representative. Currently these individuals are Leticia Walton and Aldaberto Ramirez. AFCEC Contract representatives are invited and actively participate in monthly meetings held the fourth Tuesday of each month, and are provided the

minutes for these meetings. They also participate in the monthly meeting with the EPA and NYSDEC, held the fourth Thursday of each month. They are also provided the minutes from these meetings. The CPSMR and Document Submittal Tracking Sheet are provided to the designated Contracting Representatives as well.

If any contracting issues or questions regarding contract expectations occur, such as need to extend a period of performance, contract modification requests, or potential change orders due to a differing site condition, change in contract personnel, etc., the appropriate AFCEC Contracts personnel (Swall and Ruiz) will be immediately notified and a solution based on the contract requirements and the FAR will be decided. Contact information for these individuals are included in Appendix D.

FIGURES and PLATES

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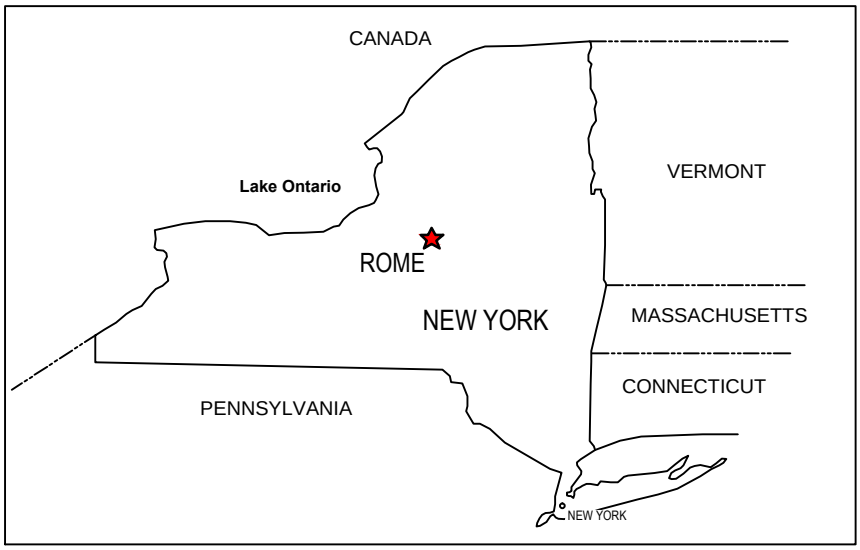
Miles

SITE LOCATION MAP



VICINITY MAP

CAPE℠

FORMER GRIFFIS AIR FORCE BASE

ROME, NEW YORK

FORMER GRIFFIS AFB LOCATION MAP

DRAWN BY:	DATE:	PROJECT No.	FIGURE No.
C.RIOS	JUNE 2013	98595.014	1
CHECKED BY: P.DULA	REVISION:		

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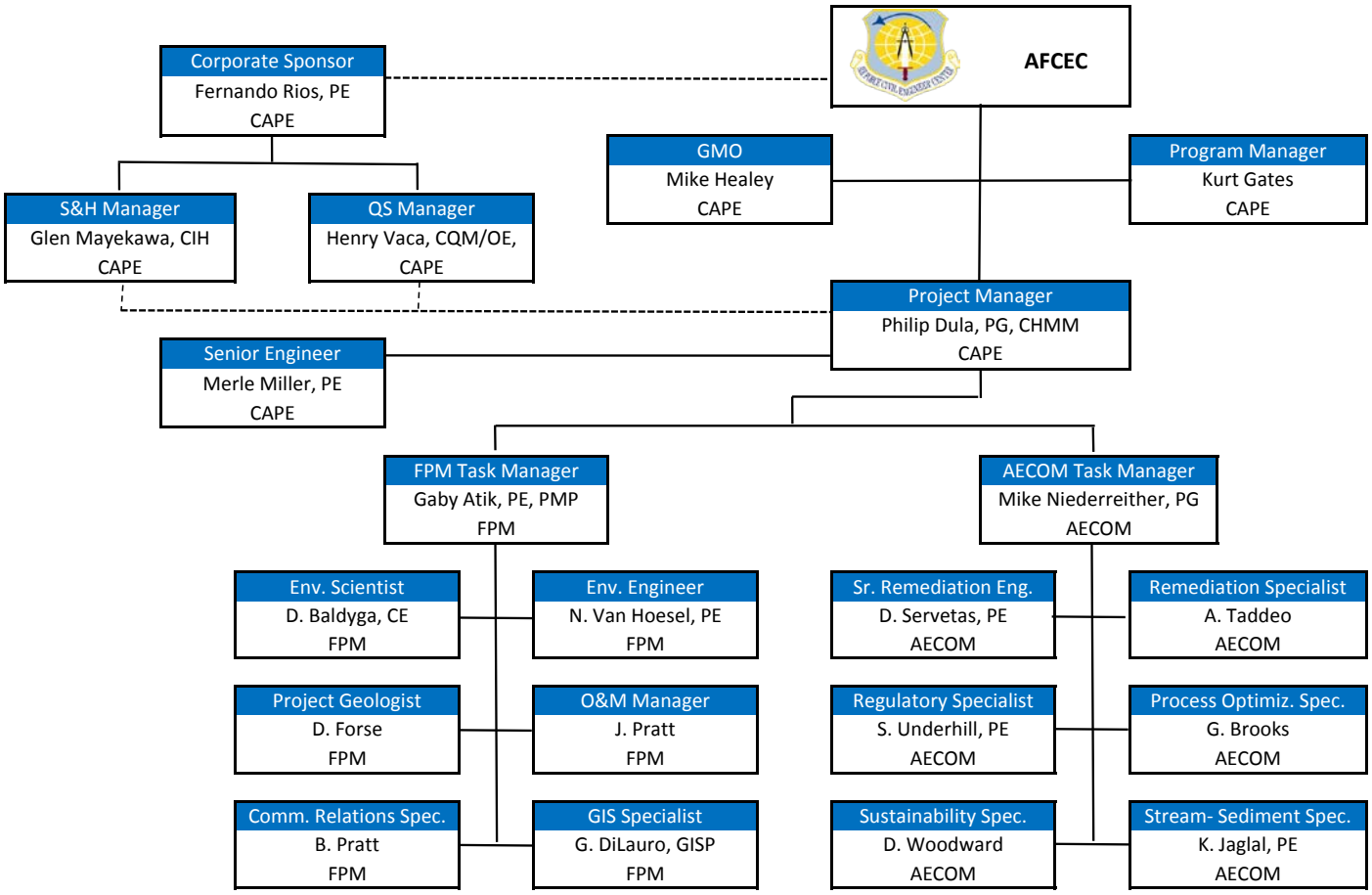


CAPE

AFCEC

ORGANIZATIONAL CHART

Performance Based-Remediation (PBR) at
Former Griffiss AFB, NY

FIGURE 2

LF001
Landfill 1

SD032
Six Mile Creek (Includes Lagoon at WSA)

AOC 9
Weapons Storage Area Landfill

FT030
Fire Protection
Training Area (FPTA)

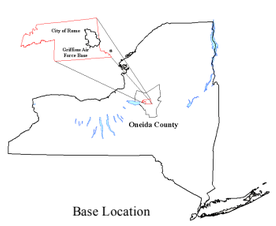
SD052-05
WSA B817 Chlorinated Plume

SS024
Fire Demonstration
Area (FDA)
Contaminated Soil

ST006
B101 - UST (Yellow Sub)
Battery Acid Disposal Pit

LF003
Landfill 7

LF002
Landfill 2 and 3



Base Location

N

Map is projected in accordance with the
State Plane New York Central - 3102 (NAD 83, Feet)


Northhern Quad

Key to Features

- Base Boundary
- Culvert / Ditch
- Surface Water
- Existing Roads / Airfield
- Demolished Roads / Airfield
- Demolished Facilities
- Existing Facilities
- Performance Based Remediation Sites

CAPE℠ FPM Remediations, Inc

UNITED STATES AIR FORCE
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

Plate 1
Performance Based Remediation Sites
Former Griffiss Air Force Base
Northern Quad

February 7, 2011

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DP022
B222 - Battery Acid
Disposal Pit

DP015
B219 Drywell

SD050
B214; Former Vehicle
Mainenance Shop
Oil/Water Separator

ST006
B101 - UST (Yellow Sub)
Battery Acid Disposal Pit

LF003
Landfill 7

AOI 474

LF002
Landfill 2 and 3

SD-050
B214; Former Vehicle Maintenance Shop
Oil/Water Separator

DP013
B255 - Two Drywells

SS070
Building 150
(NYSDEC Spill #0800273)

Building 211

SS025
T-9 Storage Area
Contaminated Soil / Groundwater

SS008
B112 - PCB Dump Area
South Side PBC Trans Leak, Roof (FormerSS-19)

ST037
B771 - pumphouse 5
Free Product on Groundwater - Petroleum

SS033
Coal Storage Area
PCB Contamination

ST053
B133 - Underground Concrete Vault

SD041
Nosedocks 1 and 2
(NYSDEC Spill #9413416)

DP012
B301 -Former Entomology Shop Drywell

SS063
Apron 1
(NYSDEC Spill #9707954)

SS020
Tank Farm 1 & 3 Contamination

SS060
STW1300
B35/36 HWSA

DP011
B3 - Drywell

SS064
Apron 2 Type II Fuel System
(NYSDEC Spill #9713631)

SS044
Substation, Electrical Power
PCB Site

LF007
Landfill 5

SD032
Six Mile Creek

SD031
Three Mile Creek

SS067
B789 Type II Fuel System
(NYSDEC Spill #9810713)

SD052-04
Landfill 6
Chlorinated Plume

SS023
B20 - Locomotive Roundhouse
Contaminated Soil

SD052-02
B775 Pumphouse 3
TCE Contamination

SS064
Apron 2 Type II Fuel System
(NYSDEC Spill #9713631)

SS017
Lot 69 -Former Hazardous
Waste Storage Yard

Area of Interest 72

SS068
Building 7001
(NYSDEC Spill #9706957)

SD052-01
Apron 2
Chlorinated Plume

SS065
B15 (NYSDEC Spill #9709366)

SS069
Bulk Fuel Storage Area
(NYSDEC Spill #9507364/9810949/0009824)

B785 Pipeline
(NYSDEC Spill #1408594)

SS066
B786 Jet Fuel Pipeline
(NYSDEC Spill #8910168)

SS054
B781 - Pumphouse
Free Product on Groundwater

Base Location

Map is projected in accordance with the
State Plane New York Central - 3102 (NAD 83, Feet)

Southern Quad

Key to Features

- Base Boundary
- Culvert / Ditch
- Surface Water
- Existing Roads / Airfield
- Demolished Roads / Airfield
- Demolished Facilities
- Existing Facilities
- Performance Based Remediation Sites

CAPE℠ FPM Remediations, Inc

UNITED STATES AIR FORCE
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

Plate 2
Performance Based Remediation Sites
Former Griffiss Air Force Base
Southern Quad

February 7, 2011

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APPENDIX A

PROJECT MANAGEMENT PLAN REVISION SUMMARY

PROJECT MANAGEMENT PLAN REVISION SUMMARY

Performance Based-Remediation (PBR) at
Former Griffiss AFB, NY

PMP Revision Description	Date of Revision
PMP REVISION REQUIRED TO UPDATE DOCUMENT WITH RESPECT TO REVISED PBR GOALS/OBJECTIVES PER 8/29/12 CONTRACT MODIFICATION. REVISIONS TO MINOR MANAGEMENT ACTIVITIES ALSO ADDRESSED	2-21-13
PMP REVISION TO INCORPORATE AFCEC REVIEW COMMENTS FOR 2-25-13 INTERNAL DRAFT OF 2012-2013 PMP UPDATE.	6-20-13
PMP REVISION TO INCORPORATE AFCEC REVIEW COMMENTS AND CONTRACT MOD 2 AND 3 ADDITIONS.	10-11-13
PMP REVISION 2014 UPDATE	6-17-14
PMP REVISION 2015 UPDATE	3-6-15

APPENDIX B

SITE SPECIFIC SUMMARIES

Site #1:	**LF001 (Landfill 1)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 1 will be maintained until 2040.
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies and monitoring parameters.

Understanding of Current Site Status: Landfill 1 is located in the northern portion of the base and is approximately 22 acres in size. The ROD for Landfill 1 was signed on June 5, 2000 by the EPA. Landfill re-grading and capping were initiated in 2003. A passive gas vent trench was installed near the northwestern perimeter of the landfill boundary in September 2005. The Five-Year Reviews were conducted for this site in 2005 and 2010 and indicated that the selected remedy is protective of human health and the environment.

Groundwater/Surface water Monitoring (initiated in December 2003)

- Thirteen monitoring wells and three surface water locations are monitored **annually** (spring rounds) for VOCs, metals, and leachate indicators.
- VOC exceedences are limited to one monitoring well LF1MW-11. In addition, metals and landfill leachate indicators are reported above NYS Groundwater Standards, Criteria, and Guidance values (SCGs) at several monitoring wells.

Landfill Gas Monitoring (initiated in April 2004)

- Eighteen gas monitoring probes and 30 gas vents are monitored **quarterly** for methane, lower explosive limit (LEL), oxygen, and carbon dioxide. Results show that methane levels are above the LELs.

Landfill Cover Maintenance (initiated in April 2005)

- Landfill cap inspections are conducted **quarterly** and landfill cap mowing is conducted annually.

Annual LUC/IC Inspections

- Implemented by the ROD and are verified **annually** through LUC/IC site inspections.

Proposed End Point, Metrics, and Approach:

Groundwater/ Surface Water Monitoring

- *Approach* **– Optimize LTM by reducing the number of wells analyzed for VOCs and optimize sampling frequency**. Continue annual monitoring (fall round) for metals and landfill leachate indicators at 13 monitoring wells and three surface water locations. Additionally, annual VOC analysis will be performed at seven groundwater monitoring wells and three surface water locations. Annual sampling will be conducted **until 2014**. **Following the 2014 event, the sampling frequency will be optimized to biennial**.
- *Rationale* - Sampling data from the site has shown continued sitewide stabilization of all VOCs, metals, and leachate indicators. VOC analysis will be conducted at the seven monitoring wells and three surface water locations to ensure that COCs are not migrating offsite or into the stream environment. Statistical analysis of all sampling results was conducted using the MAROS program. The most conservative frequency recommended is annual. However, MAROS recommends biennial sampling at several wells at the site. Therefore, it is anticipated that, using the additional two years of data, MAROS analysis will support biennial sampling at the entire site.

Landfill Gas Monitoring

- *Approach* – **Optimize landfill gas monitoring from quarterly monitoring to semiannual** (spring and fall). Eighteen gas monitoring probes and 30 gas vents will be monitored for methane, LEL, oxygen, and carbon dioxide.
- *Rationale* - Elevated methane concentrations persist throughout the landfill but these levels are stable. Methane is not detected at the point of compliance gas monitoring probes or the passive gas trench installed near the northwestern perimeter of Landfill 1 indicating it is effectively preventing methane migration into neighboring properties.

Landfill Cover Maintenance

- *Approach* – **Optimize landfill cover inspections and maintenance to semiannual**. Conduct landfill cap mowing in the fall of every year.
- *Rationale* - Vegetation growth on the landfill cap shows optimal coverage for erosion control and cover system stabilization. Spring and fall inspections are proposed as the landfills are covered by snow in the winter and by tall grasses in the summer. Additional inspections or maintenance will be performed as needed, as identified in the January 2005 Landfill 1 O&M Manual.

Long Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long-Term Monitoring Reports. The Reports will also include site figures in GIS format.

Annual LUC/IC Inspections

- *Approach* - Annual inspections will be conducted to confirm the implementation and performance of the LUC/ICs. All results will be reported annually in the Base wide LUC/IC Site Inspection Report.
- *Rationale* - LUC/ICs will be maintained in order to protect human health and the environment.

Site #1:	**LF001 (Landfill 1)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 1 will be maintained until 2040.
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies and monitoring parameters.

Five-Year Review

- Landfill 1 will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Potential Risks and Mitigation Strategies: Potential risks include the increase of groundwater and surface water contaminants and increases in methane concentrations. This risk is considered low. The mitigation strategy will include the increased frequency of groundwater and surface water monitoring and landfill gas monitoring. Additional potential risks include disturbances to the landfill cap. This may be the result of significant rainfall over a 24-hour period or vector disturbance to the landfill cap, for example. FPM's onsite presence mitigates this risk with the ability to readily identify such disturbances and mitigate them in accordance with the Landfill 1 O&M Manual.

Post-POP Activity and AF Financial Liability:

Groundwater/surface water monitoring - Based on the declining/stable COC levels, **we anticipate sampling will be optimized to every five years (2020, 2025, 2030, 2035, and 2040).** Samples will be analyzed for landfill leachate indicators. All LTM optimization will be conducted through the evaluation of sampling data and the use of MAROS. Sampling data and MAROS recommendations will be included in the Long-Term Monitoring Reports.

Landfill Gas Monitoring – The **frequency will be optimized to annual** following this POP with annual reporting until 2040. Perimeter locations will be monitored using an **automated monitoring system**.

Monitoring Well and Landfill Gas Probe Decommissioning - Following closure of the site, the 13 remaining monitoring wells and 18 landfill gas probes will be decommissioned using NYSDEC-approved decommissioning procedures. As a result of the continuous generation of gases, the passive landfill gas collection trench and gas vents will remain in place. It should be noted that the site is zoned as low-intensity open space and will not be developed. Therefore, the presence of the gas vents will not interfere with future site use.

Landfill Cover Maintenance – The ROD requires the continued landfill cap inspections and maintenance which will be conducted. **The optimized frequency will be annual with annual reporting.** Also, additional landfill cap inspections and maintenance may be conducted in accordance with the Landfill 1 O&M Manual.

Annual LUC/IC Inspections - LUC/IC inspections will be conducted and reported annually.

Five-Year Review – Landfill 1 will be included in all future GRIFFISS Five-Year Reviews. The Five-Year Reviews will include a summary of all monitoring data, all maintenance activities, and LUC/IC inspection results.

Financial Liability - The estimated cost for the post POP activities, including Five-Year Review and monitoring well and landfill gas probe decommissioning, is $317,000.

Site #2:	**LF002 (Landfill 2/3)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 2/3 will be maintained until 2040.
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Understanding of Current Site Status: Landfill 2/3 is approximately 13 acres in size and is located in the east-central portion of the Base. The ROD for Landfill 2/3 was signed on June 5, 2000 by the EPA. In summer 2002 the re-grading and capping of the landfill were initiated. The Five-Year Reviews were conducted for this site in 2005 and 2010 and indicated that the selected remedy is protective of human health and the environment.

Groundwater/Surface water Monitoring (initiated in December 2003)

- Six monitoring wells and three surface water locations are monitored **annually** for metals and leachate indicators.
- Metals and landfill leachate indicators are reported above NYS Groundwater SCGs at several monitoring wells.

Landfill Gas Monitoring (initiated in October 2005)

- Nine gas monitoring probes and 14 gas vents are monitored **semiannually** for methane, LEL, oxygen, and carbon dioxide.
- Results show that methane levels are above the LELs.

Landfill Cover Maintenance (initiated in April 2005)

- Landfill cap inspections and maintenance are conducted **quarterly** and landfill cap mowing is conducted annually (in the fall).

Annual LUC/IC Inspections

- LUC/ICs were implemented by the ROD and are verified **annually** through LUC/IC site inspections.

Proposed End Point, Metrics, and Approach:

Groundwater/Surface Water Monitoring

- *Approach* **– Optimize sampling frequency.** Six monitoring wells and three surface water locations will be monitored **annually** (fall round) for metals and landfill leachate indicators **until 2012**. **Following the 2012 event, the sampling frequency will be optimized to biennial**.
- *Rationale* **–** Statistical analysis of all sampling results was conducted using the MAROS program. The most conservative frequency recommended is annual. However, MAROS recommends biennial sampling at several wells at the site. Therefore, it is anticipated that using the additional two years of data, MAROS will support biennial sampling at the entire site.

Landfill Gas Monitoring

- *Approach* **– Optimize landfill gas monitoring from quarterly monitoring to semiannual**. Nine gas monitoring probes and 14 gas vents will be monitored for methane, LEL, oxygen, and carbon dioxide.
- *Rationale* **–** Previous landfill gas monitoring rounds show that elevated methane concentrations persist throughout the landfill, but these levels are stable. Methane is not detected at any of the point of compliance gas monitoring probes; therefore the potential risk of human exposure is limited.

Landfill Cover Maintenance

- *Approach* – Quarterly landfill cover inspections and maintenance will be **optimized to semiannual** (spring and fall) and landfill cap mowing will be conducted annually.
- *Rationale* - Vegetation growth on the landfill cap shows optimal coverage for erosion control and cover system stabilization. Spring and fall inspections are proposed as the landfills are covered by snow in the winter and by tall grasses in the summer. Additional inspections or maintenance will be performed as needed, as identified in the December 2003 Landfill 2/3 O&M Manual.

Long-Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long-Term Monitoring Reports. The Reports will also include site figures in GIS format.

Annual LUC/IC Inspections

- *Approach* - Annual inspections will be conducted to confirm the implementation and performance of the LUC/ICs. All results will be reported annually in the Basewide LUC/IC Site Inspection Report.
- *Rationale* - LUC/ICs, as required by the ROD, will be maintained in order to protect human health and the environment.

Five-Year Review

- Landfill 2/3 will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Potential Risks and Mitigation Strategies: Potential risks include the increase of groundwater and surface water contaminants and increases in methane concentrations. This risk is considered to be low. The mitigation strategy will include the increased frequency of groundwater and surface water monitoring and landfill gas monitoring. Additional potential risks include disturbances to the landfill cap. This may be the result of significant rainfall over a 24-hour period or vector disturbance to the landfill cap, for example. FPM's onsite presence mitigates this risk with the ability to readily identify such disturbances and mitigate them in accordance with the Landfill 2/3 O&M Manual.

Site #:	LF002 (Landfill 2/3)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 2/3 will be maintained until 2040.
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Post-POP Activity and AF Financial Liability:

Groundwater / surface water monitoring **-** Based on the declining/stable COC levels, **we anticipate sampling will be optimized to every five years (2020, 2025, 2030, 2035, and 2040)**. Samples will be analyzed for landfill leachate indicators. All LTM optimization will be conducted through the evaluation of sampling data and the use of MAROS. Sampling data and MAROS recommendations will be included in the Long-Term Monitoring Reports.

Landfill Gas Monitoring - The **frequency will be optimized to annual** following this POP with annual reporting until 2040. Perimeter locations will be monitored using an **automated monitoring system**.

Monitoring Well and Landfill Gas Probe Decommissioning - Following closure of the site, the six remaining monitoring wells will be decommissioned using NYSDEC approved decommissioning procedures. Additionally, all nine remaining landfill gas probes will be decommissioned. As a result of the continuous generation of gases, gas vents will remain in place. It should be noted that the site is zoned as low-intensity open space and will not be developed. Therefore, the presence of the gas vents will not interfere with future site use.

Landfill Cover Maintenance – The ROD requires the continued landfill cap inspections and maintenance, which will be conducted. **The optimized frequency will be annual with annual reporting.** Also, additional landfill cap inspections and maintenance may be conducted in accordance with the Landfill 2/3 O&M Manual.

Annual LUC/IC Inspections - LUC/IC inspections will be conducted annually with annual reporting.

Five-Year Review – Landfill 2/3 will be included in all future GRIFFISS Five-Year Reviews. The Five-Year Reviews will include a summary of all monitoring data, all maintenance activities, and LUC/IC inspection results.

Financial Liability - The estimated cost for the post POP activities, including Five-Year Review and monitoring well and landfill gas probe decommissioning, is $207,000.

Site #3:	LF003 (Landfill 7)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 7 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Understanding of Current Site Status: Landfill 7 is approximately 11 acres in size and located northeast of Runway 15/33. The ROD for Landfill 7 was signed on June 5, 2000 by the EPA. In spring 2002 the re-grading and capping of the landfill were initiated. The Five-Year Reviews were conducted for this site in 2005 and 2010 and indicated that the selected remedy is protective of human health and the environment.

Groundwater/Surface water Monitoring (initiated in December 2003)

- Eight monitoring wells and two surface water locations are monitored **annually** for metals.
- Metals are reported above NYS Groundwater SCGs at several monitoring wells.

Landfill Cover Maintenance (initiated in September 2003)

- ***Quarterly*** landfill cap inspections and annual landfill cap mowing.

Annual LUC/IC Inspections

- Implemented by the ROD and are verified **annually** through LUC/IC site inspections.

Proposed End Point, Metrics, and Approach:

Groundwater/Surface Water Monitoring

- *Approach* **– Optimize sampling frequency.** Eight monitoring wells and two surface water locations will be monitored **annually** (spring round) for metals **until 2012**. **Following the 2012 event, the sampling frequency will be optimized to biennial**.
- *Rationale* **–** Statistical analysis of all sampling results was conducted using the MAROS program. The most conservative frequency recommended is annual. However, MAROS recommends biennial sampling at several wells at the site. Therefore, it is anticipated that, using the additional two years of data, MAROS will support biennial sampling at the entire site.

Landfill Cover Maintenance

- *Approach* – Quarterly landfill cover inspections and maintenance will be **optimized to semiannual**. Conduct annual landfill cap mowing in the fall.
- *Rationale* - Vegetation growth on the landfill cap shows optimal coverage for erosion control and cover system stabilization. Spring and fall inspections are proposed as the landfills are covered by snow in the winter and by tall grasses in the summer. Additional inspections or maintenance will be performed as needed, as identified in the September 2003 Landfill 7 O&M Manual.

Long-Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long Term Monitoring Reports. The Reports will also include site figures in GIS format.

Annual LUC/IC Inspections

- *Approach* - Annual inspections will be conducted to confirm the implementation and performance of the LUC/ICs. All results will be reported annually in the Base wide LUC/IC Site Inspection Report.
- *Rationale* - LUC/ICs, as required by the ROD, will be maintained in order to protect human health and the environment.

Five-Year Review

- Landfill 7 will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Potential Risks and Mitigation Strategies: Potential risks include the increase of groundwater and surface water contaminants. This risk is considered to be low. The mitigation strategy will include the increased frequency of groundwater and surface water monitoring. Additional potential risks include disturbances to the landfill cap. This may be the result of significant rainfall over a 24-hour period or vector disturbance to the landfill cap, for example. FPM's onsite presence mitigates this risk with the ability to readily identify such disturbances and mitigate them in accordance with the Landfill 7 O&M Manual.

Post-POP Activity and AF Financial Liability:

Groundwater/ surface water monitoring - Based on the declining/stable COC levels, **we anticipate sampling will be optimized to every five years (2020, 2025, 2030, 2035, and 2040)**. Samples will be analyzed for metals. All LTM optimization will be conducted through the evaluation of sampling data and the use of MAROS. Sampling data and MAROS recommendations will be included in the LTM Reports.

Monitoring Well Decommissioning - Following closure of the site, the eight remaining monitoring wells will be decommissioned using NYSDEC-approved decommissioning procedures.

Landfill Cover Maintenance – The ROD requires the continued landfill cap inspections and maintenance, which will be conducted. **The**

Site #3:	**LF003 (Landfill 7)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 7 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.
optimized frequency will be annual with annual reporting. Also, additional landfill cap inspections and maintenance may be conducted in accordance with the Landfill 7 O&M Manual. ***Annual LUC/IC Inspections*** - LUC/IC inspections will be conducted annually with annual reporting. ***Five-Year Review*** – Landfill 7 will be included in all future GRIFFISS Five-Year Reviews. The Five-Year Reviews will include a summary of all monitoring data, all maintenance activities, and LUC/IC inspection results. ***Financial Liability -*** The estimated cost for the post POP activities, including Five-Year Review and monitoring well and landfill gas probe decommissioning, is $264,000.	

Site #4:	LF007 (Landfill 5)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 5 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Understanding of Current Site Status: Landfill 5 is approximately 4 acres in size and is located in the south-central portion of the base. The ROD for Landfill 5 was signed by the EPA on June 5, 2000. In fall 2002, the re-grading and capping of the landfill were initiated. The Five-Year Reviews were conducted for this site in 2005 and 2010 and indicated that the selected remedy is protective of human health and the environment.

Groundwater/Surface water Monitoring (initiated in February 2003)

- Five monitoring wells and three surface water locations are monitored annually for metals.
- Metals are reported above NYS Groundwater SCGs at several monitoring wells.

Landfill Cover Maintenance (initiated in September 2003)

- Inspections and maintenance are conducted quarterly and landfill cap mowing is conducted annually (in the fall).

Annual LUC/IC Inspections

- LUC/ICs were implemented by the ROD and are verified annually through LUC/IC site inspections.

Proposed End Point, Metrics, and Approach:

Groundwater/Surface Water Monitoring

- *Approach* **– Optimize sampling frequency.** Five monitoring wells and three surface water locations will be monitored **annually** (fall round) for metals **until 2012**. **Following the 2012 round, the sampling frequency will be optimized to biennial.**
- *Rationale* **–** Statistical analysis of all sampling results was conducted using the MAROS program. The most conservative frequency recommended is annual. However, MAROS recommends biennial sampling at several wells at the site. Therefore, it is anticipated that, using the additional two years of data, MAROS will support biennial sampling at the entire site.

Landfill Cover Maintenance

- *Approach* – Quarterly landfill cover inspections and maintenance will be **optimized to semiannual** with annual landfill over mowing.
- *Rationale* - Vegetation growth on the landfill cap shows optimal coverage for erosion control and cover system stabilization. Spring and fall inspections are proposed as the landfills are covered by snow in the winter and by tall grasses in the summer. Additional inspections or maintenance will be performed as needed, as identified in the September 2003 Landfill 5 O&M Manual.

Long-Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long-Term Monitoring Reports. The Reports will also include site figures in GIS format.

Annual LUC/IC Inspections

- *Approach* - Annual inspections will be conducted to confirm the implementation and performance of the LUC/ICs. All results will be reported annually in the Bases wide LUC/IC Site Inspection Report.
- *Rationale* - LUC/ICs, as required by the ROD, will be maintained in order to protect human health and the environment.

Five-Year Review

- Landfill 5 will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Potential Risks and Mitigation Strategies: Potential risks include the increase of groundwater and surface water contaminants. This risk is considered low. The mitigation strategy will include the increased frequency of groundwater and surface water monitoring. Additional potential risks include disturbances to the landfill cap. This may be the result of significant rainfall over a 24-hour period or vector disturbance to the landfill cap, for example. FPM's onsite presence mitigates this risk with the ability to readily identify such disturbances and mitigate them in accordance with the Landfill 5 O&M Manual.

Post-POP Activity and AF Financial Liability:

Groundwater/ surface water monitoring - Based on the declining/stable COC levels, **we anticipate sampling will be optimized to every five years (2020, 2025, 2030, 2035, and 2040)**. Samples will be analyzed for metals. All LTM optimization will be conducted through the evaluation of sampling data and the use of MAROS. Sampling data and MAROS recommendations will be included in the annual reports.

Monitoring Well Decommissioning - Following closure of the site, the six remaining monitoring wells will be decommissioned using NYSDEC-approved decommissioning procedures.

Site #4:	LF007 (Landfill 5)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 5 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Landfill Cover Maintenance – The ROD requires the continued landfill cap inspections and maintenance, which will be conducted. **The optimized frequency will be annual with annual reporting.** Also, additional landfill cap inspections and maintenance may be conducted in accordance with the Landfill 5 O&M Manual.
Annual LUC/IC Inspections - LUC/IC inspections will be conducted annually with annual reporting.
Five-Year Review – Landfill 5 will be included in all future GRIFFISS Five-Year Reviews. The Five-Year Reviews will include a summary of all monitoring data, all maintenance activities, and LUC/IC inspection results.
Financial Liability - The estimated cost for the post POP activities, including Five-Year Review and monitoring well and landfill gas probe decommissioning, is $167,000.

Site #5:	LF009 (Landfill 6)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 6 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Understanding of Current Site Status: Landfill 6 is approximately 16 acres in size and located in the southern portion of the base. The ROD for the Landfill 6 AOC was signed on June 7, 2000 by the EPA. In summer 2004, the re-grading and capping of the landfill was initiated. The Five-Year Reviews were conducted for this site in 2005 and 2010. The remedy was still under evaluation during the 2005 Five-Year Review. During the 2010 Five-Year Review, the selected remedy was found to be protective of human health and the environment.

Groundwater/Surface water Monitoring (initiated in June 2006)

- Nineteen monitoring wells and six surface water locations are monitored **semiannually** for VOCs, metals, mercury, cyanide, and leachate indicators.
- Chlorinated VOC exceedences are limited to three monitoring wells: 775VMW-10, LF6MW-12, LF6VMW-26; and wetland sample location LF6W-1. In addition, metals and landfill leachate indicators are reported above NYS Groundwater SCGs at several monitoring wells.

Landfill Gas Monitoring (initiated in June 2006)

- Thirteen gas monitoring probes and 16 gas vents are monitored **semiannually** for methane, LEL, oxygen, and carbon dioxide.
- Results show that methane levels are above the LEL.

Landfill Cover Maintenance (initiated in June 2006)

- Landfill cap inspections and maintenance are conducted **quarterly** and landfill cap mowing is conducted annually (in the fall).

Annual LUC/IC Inspections

- LUC/ICs were implemented by the ROD and are verified annually through LUC/IC site inspections.

Site Closure Criteria: Per the Federal Facilities Agreement, the AOC will be maintained until 2040.

Proposed End Point, Metrics, and Approach:

Groundwater/ Surface Water Monitoring

- *Approach* **–Optimize LTM by reducing the number of wells analyzed for VOCs and optimize the sampling frequency.** Nineteen groundwater monitoring wells and six surface water locations will be monitored **annually** (fall round) for metals, mercury, cyanide, and landfill leachate indicators. Additionally, annual VOC analysis will be performed at monitoring wells 775VMW-10; LF6VMW-12, -23, -24, -25, -26; and TMCMW-9; surface water locations LF6SW-1, -2, and -3; and wetland sample LF6W-1. Annual sampling will be conducted **until 2014**. **Following the 2014 round, the sampling frequency will be optimized to biennial**.
- *Rationale* - Previous sampling data from the site has shown continued site-wide stabilization of all VOCs, metals, and leachate indicators. VOC analysis will be conducted at seven monitoring wells and four surface water locations to ensure COCs are not migrating offsite or into the stream environment. Statistical analysis of all sampling results was conducted using the MAROS program. The most conservative frequency recommended is annual. However, MAROS recommends biennial sampling at several wells at the site. Therefore, it is anticipated that using the additional four years of data, MAROS will recommend biennial sampling for the entire site. Trichloroethene (TCE) is the only VOC in exceedence at Landfill 6. The Landfill 6 Chlorinated Plume is part of the SD052 On-Base Groundwater Contamination Program and is sampled semi-annually.

Landfill Gas Monitoring

- *Approach* – We propose to **optimize landfill gas monitoring from quarterly monitoring to semiannual**. Thirteen gas monitoring probes and 16 gas vents will be monitored for methane, LEL, oxygen, and carbon dioxide.
- *Rationale* - Previous landfill gas monitoring rounds show that elevated methane concentrations persist throughout the landfill but these levels are stable. Methane is not detected at the point of compliance gas monitoring probes on Landfill 6, indicating that it is effectively preventing methane migration into neighboring properties.

Landfill Cover Maintenance

- *Approach* – Quarterly landfill cover inspections and maintenance will be **optimized to semiannual** and annual landfill cap mowing.
- *Rationale* - Vegetation growth on the landfill cap shows optimal coverage for erosion control and cover system stabilization. Spring and fall inspections are proposed as the landfills are covered by snow in the winter and by tall grasses in the summer. Additional inspections or maintenance will be performed as needed, as identified in the December 2006 Landfill 6 O&M Manual.

Site #5:	**LF009 (Landfill 6)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy. Landfill 6 will be maintained until 2040
General Strategy:	Conduct monitoring and maintenance. Reduce monitoring and O&M frequencies.

Long-Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long Term Monitoring Reports. The Reports will also include site figures in GIS format.

Annual LUC/IC Inspections

- *Approach* - Annual inspections will be conducted to confirm the implementation and performance of the LUC/ICs. All results will be reported annually in the Base wide LUC/IC Site Inspection Report.
- *Rationale* - LUC/ICs, as required by the ROD, will be maintained in order to protect human health and the environment.

Five-Year Review

- Landfill 6 will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Potential Risks and Mitigation Strategies: Potential risks include the increase of groundwater and surface water contaminants and increases in methane concentrations. This risk is considered to be low. The mitigation strategy will include the increased frequency of groundwater and surface water monitoring and landfill gas monitoring. Additional potential risks include disturbances to the landfill cap. This may be the result of significant rainfall over a 24-hour period or vector disturbance to the landfill cap, for example. FPM's onsite presence mitigates this risk with the ability to readily identify such disturbances and mitigate them in accordance with the Landfill 6 O&M Manual.

Post-POP Activity and AF Financial Liability:

Groundwater / surface water monitoring **-** Based on the declining/stable COC levels, **we anticipate sampling will be optimized to every five years (2020, 2025, 2030, 2035, and 2040)**. Samples will be analyzed for landfill leachate indicators. All LTM optimization will be conducted through the evaluation of sampling data and the use of MAROS. Sampling data and MAROS recommendations will be included in the Long Term Monitoring Reports.

Landfill Gas Monitoring - The **frequency will be optimized to annual** following this POP with annual reporting until 2040. Perimeter locations will be monitored using an **automated monitoring system**.

Monitoring Well and Landfill Gas Probe Decommissioning - Following closure of the site, the 19 remaining monitoring wells will be decommissioned using the NYSDEC-approved decommissioning procedures. Additionally, all 13 remaining landfill gas probes will be decommissioned. As a result of the continuous generation of gases, gas vents will remain in place. It should be noted that the site is zoned as low-intensity open space and will not be developed. Therefore, the presence of the gas vents will not interfere with future site use.

Landfill Cover Maintenance – The ROD requires the continued landfill cap inspections and maintenance, which will be conducted. **The optimized frequency will be annual with annual reporting.** Also, additional landfill cap inspections and maintenance may be conducted in accordance with the Landfill 6 O&M Manual.

Annual LUC/IC Inspections - LUC/IC inspections will be conducted annually with annual reporting.

Five-Year Review – Landfill 6 will be included in all future GRIFFISS Five-Year Reviews. The Five-Year Reviews will include a summary of all monitoring data, all maintenance activities, and LUC/IC inspection results.

Financial Liability - The estimated cost for the post POP activities, including Five-Year Review and monitoring well and landfill gas probe decommissioning, is $327,000.

Site #6:	**SD031 (Three Mile Creek)**
Projected Closure Date:	2015 **Site Closure approved 9/2/14**
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Confirmation of sediment PCB concentrations below 1 ppm and stabilization and decline of PCB levels in Fish tissue.

Understanding of Current Site Status: Three Mile Creek (TMC) is located in a forested area in the southern part of GRIFFISS. It is bordered by the Electrical Power Substation (EPS) and Landfills 4, 5, and 6. The creek originates at two storm water culvert outlets located at Ellsworth Road and Wright Drive (near the EPS). Sediment sampling during the 1994 RI showed PCB (Aroclor 1260) detections from 3.4 -7.5 ppm. The source of the contamination was several PCB spills at the EPS. The ROD was signed by the EPA on March 26, 2004. The RA of 2004 and 2005 removed contaminated sediments in the on-base and off-base portions of TMC. The goal of the RA was to reduce PCB concentrations to 1 ppm in sediments. Five-Year Reviews were conducted for this site in 2005 and 2010. The remedy was still under evaluation during the 2005 Five-Year Review. During the 2010 Five-Year Review, the selected remedy was found to be protective of human health and the environment.
RACR Report was prepared per NYSDEC request and was an additional document Final RACR was submitted on January 10, 2013.Sediment data has continued to show PCB concentrations below 1 ppm throughout the creek. NYSDEC Fish and Wildlife has expressed some concerns regarding PCB levels in fish tissue and vernal pool habitat in a 9/19/13 letter. Response letter sent 10/28/13 and a final position letter submitted on 2/25/14. EPA issued a closure letter on September 2, 2014.

Surface Water Monitoring (initiated in October 2006)

- Seven sampling locations were monitored **annually** and analyzed for semi-volatile organic compounds (SVOCs), metals, pesticides, and PCBs.
- SVOCs and metals are in exceedence of the NYS Surface Water SCGs.

Sediment Monitoring (initiated in October 2006)

- Seven sampling locations were monitored **annually** and analyzed for SVOCs, metals, pesticides, and PCBs.
- SVOCs, pesticides, PCBs, and metals concentrations were detected above the most stringent ecological screening value. PCB (Aroclor 1260) was detected from 0.00797-0.570 ppm. The most stringent ecological screening value for Aroclor 1260 is 0.005 ppm.

Fish tissue sampling and benthic qualitative assessment (initiated in October 2006)

- Performed at five sampling locations **every three years**.
- Fish tissue samples were analyzed for pesticides, PCBs, cadmium, mercury, and % lipids. Pesticides, PCBs, and cadmium, and mercury detections were reported in fish tissue samples at all of the sampling sites. All locations had at least one fish sample with a PCB or pesticide concentration above the NYSDEC piscivorous wildlife criteria. At sampling locations 1, 4, and 5, PCB concentrations were detected above the New York State Department of Health (NYSDOH) Fish Advisory Guidelines.
- Benthic qualitative assessment showed that the creek was slightly too moderately impacted. However, it should be noted that due to the sandy substrate and slow water flow in portions of the creek, TMC is considered a poor habitat for benthic macro-invertebrates.

Site Closure Criteria: The site closure criteria for TMC includes potential contamination source control, confirmation of sediment PCB concentrations below 1 ppm, and stabilization and decline of PCB levels in fish tissue.

Proposed End Point, Metrics, and Approach:

Surface water Monitoring

- *Approach* – **Discontinue surface water monitoring**.
- *Rationale* - TMC surface water is proposed for sampling in the Landfill 5 and Landfill 6 LTM networks. It is anticipated that any potential contamination in the creek will be identified through these source area LTM networks. In addition, the source of any surface water contamination has been confirmed to be a result of the contaminated suspended solids from sediments.

Sediment Monitoring

- ***Approach – Conduct*** annual sediment sampling for PCBs, SVOCs, and pesticides analysis at seven sampling locations.
- *Rationale* - PCBs, SVOCs, and pesticides have been reported in the sediment above the most stringent ecological screening criteria. However, the RA has shown a significant reduction in COC concentrations of over two orders of magnitude and has achieved the RA goal of reducing PCB concentrations to 1 ppm or less throughout the creek.

Fish tissue sampling and benthic qualitative assessment

- *Approach* - Fish tissue sampling and benthic qualitative assessment are proposed at five sampling locations in 2012 and 2015.
- *Rationale* - Fish tissue samples will be analyzed for pesticides, PCBs, cadmium, mercury, and % lipids to confirm the stabilization and decline of COCs levels in fish tissue. The 2006 and 2009 fish tissue sampling results showed pesticide, PCBs, and metals

Site #6:	**SD031 (Three Mile Creek)**
Projected Closure Date:	2015 **Site Closure approved 9/2/14**
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Confirmation of sediment PCB concentrations below 1 ppm and stabilization and decline of PCB levels in Fish tissue.

above NYSDEC piscivorous wildlife criteria. Additionally, tissue samples from three sampling locations (TMC-1, -4, and -5) showed PCB levels above NYSDOH fish advisory guidelines. The COCs concentrations are stable. Since the bioavailability of COCs has decreased, it is anticipated that COC concentrations will also decline in the fish tissue over time. Benthic qualitative assessment performed every three years will provide a continued habitat assessment as contamination declines.

Long-Term Monitoring Reporting and Site Closure

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long Term Monitoring Reports. The Reports will also include site figures in GIS format.
- All historical data will be presented and analyzed to support that contamination levels have stabilized to pre-RI levels, thus supporting closure in accordance with the original LTM Work Plan.

Potential Risks and Mitigation Strategies: Potential risks for this site include the increase of COCs in fish tissue and the degradation of the TMC area ecosystem. These risks considered to be are moderate, however, will be mitigated through continued annual sediment and triennial fish tissue monitoring. In addition, **contingency planning includes applying an activated carbon that is designed to stabilize creek sediments contaminated with PCBs and reduce out-year monitoring if closure is not accepted.** The carbon will expedite the reduction of bioaccumulation and remediate PCBs over time.

Post-POP Activity and AF Financial Liability: The site will close by 2015 with unrestricted use. The fish advisory will remain at the site independent of the Air Force requirements. Site closed 9/2/14.

Site #7:	**SD032 (Six Mile Creek includes Lagoon at WSA)**
Projected Closure Date:	2015 **Site Closure approved 9/2/14**
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Source control at Rainbow Creek and the Apron 2 Petroleum Spill Site.

Understanding of Current Site Status: Six Mile Creek (SMC) is a natural stream bordered by wetlands that enters GRIFFISS from the north and exits to the southeast, intersecting the Base runway. The creek serves as a surface water runoff and storm water drainage system for the Base. Surface water runoff from Landfills 1, 2/3, and 7, the Weapon Storage Area (WSA), WSA Landfill, runway, on-base shops, and Rainbow Creek flows to the creek. The ROD was signed by the EPA on March 26, 2004.
RACR Report was prepared per NYSDEC request and was an additional document Final RACR was submitted on January 10, 2013. Sediment data has continued to show PCB concentrations below 1 ppm throughout the creek and the source has been eliminated at Rainbow Creek. NYSDEC Fish and Wildlife has expressed some concerns regarding PCB levels in fish tissue and vernal pool habitat in 9/19/13 letter. Response letter sent 12/19/13 and a final position letter submitted on 2/25/14. EPA issued a closure letter on September 2, 2014.

Surface water Monitoring (initiated in October 2004)

- Three sampling locations were monitored **annually** for VOCs.
- VOC detections are present in surface water at locations down gradient of the Apron 2 petroleum spill site.

Sediment Monitoring (initiated in October 2004)

- Three sampling locations were monitored **annually** for SVOCs, PCBs, and pesticides.
- PCB (Aroclor 1254), pesticide (dieldrin), and SVOC contamination exists in creek sediments downstream of Rainbow Creek.

Fish tissue sampling and benthic qualitative assessment (initiated in October 2006)

- Fish tissue sampling and qualitative benthic macro invertebrate community analysis were performed at four sampling locations **every three years**. The fish tissue samples are analyzed for pesticides, PCBs, cadmium, mercury, and % lipids.
- Fish tissue results from fish collected downstream of Rainbow Creek showed PCB concentrations above NYSDEC Piscivorous Wildlife Criteria but below NYSDOH Fish Advisory Guidelines.
- Benthic qualitative assessment shows that the on-base portion of the creek is impacted. However, this may be attributed to poor habitat for benthic macro-invertebrates.

Site Closure Criteria: Contamination Source control.

Proposed End Point, Metrics, and Approach:

Surface water Monitoring

- ***Approach*** – **Optimize surface water sampling by reducing the number of sampling locations sampled**. Two sampling locations, SMC-1 and SMC-3, will be monitored annually under the SMC LTM network until the remedy at AOC-9 is in place. Samples will be analyzed for VOCs.
- *Rationale* - Monitoring data will be used to confirm that no potential contamination from the AOC-9 site is discharging to SMC. Currently, only surface water contamination that is associated with the Apron 2 Petroleum Spill Site is discharging to SMC. Surface water down gradient of Apron 2 will also be sampled in association with the Apron 2 Petroleum Spill Site until spill closure. Sampling at SMC-1 will be conducted to allow for results comparison with an un-impacted upgradient location.

Sediment Monitoring

- *Approach* - Conduct annual sediment sampling in SMC at three sampling locations for SVOCs, PCBs, and pesticides. Two sampling locations are located down gradient of the Rainbow creek culvert.
- *Rationale* - Previous sampling results show that sediment contamination is limited to sampling locations down-gradient of Rainbow Creek (SMC-4 and -5). Due to the completion of the culvert in Rainbow Creek in 2009, we expect to see a decreasing trend in PCB and SVOC detections as the potential for contaminated sediment migration has been eliminated. Sampling at SMC-1 will be conducted to allow for results comparison with an un-impacted upgradient location.

Fish tissue sampling and benthic qualitative assessment

- *Approach* - Conduct fish tissue sampling and benthic qualitative assessment at SMC-1,-4 and -5 in 2013 in accordance with the SMC AOC LTM Work Plan. Fish tissue samples will be analyzed for pesticides, PCBs, cadmium, mercury, and % lipids.
- *Rationale* - Due to the PCB and SVOC contamination shown in sediment samples from SMC-4 and -5, fish tissue sampling will be conducted in 2013 to assess the bioaccumulation of PCBs in fish tissue at these sites. Benthic qualitative assessment will be conducted to provide a continued habitat assessment as contamination declines. Fish tissue sampling and benthic qualitative assessment at SMC-1 will be used for results comparison with an un-impacted upgradient location.

Site #7:	**SD032 (Six Mile Creek includes Lagoon at WSA)**
Projected Closure Date:	2015 **Site Closure approved 9/2/14**
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Source control at Rainbow Creek and the Apron 2 Petroleum Spill Site.

Long-Term Monitoring Reporting and Site Closure

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long Term Monitoring Reports. The Reports will also include site figures in GIS format.
- All historical data will be presented and analyzed to support that contamination levels have stabilized to pre-RI levels, thus supporting closure in accordance with the LTM Work Plan.

Potential Risks and Mitigation Strategies: Potential risks at the site include the discharge of chlorinated VOC contamination from the AOC-9 site and the degradation of the SMC ecosystem. The proposed monitoring is appropriate in acting as an early warning system for any of the potential risks. Addition measurements to eliminate the discharge of chlorinated VOC contamination into the creek will be addressed through the AOC-9 O&M program, which will be supported by future data. Additional risks include the increase of PCBs in sediments and VOCs in surface water. These risks are considered to be low as the source of the PCB contamination has been eliminated, and the source of VOC contamination is undergoing remediation at the Apron 2 petroleum spill site.

Post-POP Activity and AF Financial Liability: The site will close with unrestricted use by the completion of this POP. Site closed 9/2/14.

Site #8:	SD052 (Soil Vapor Intrusion System)
Projected Closure Date:	2020
Site Objective:	Optimized Exit Strategy
General Strategy:	O&M of SVI mitigation systems and monitoring.

Understanding of Current Site Status: Buildings 774 and 776 are located between Phoenix Drive and Patrol Road. Buildings 785 and 786 are located on the southwestern corner of Apron 2 between Aprons 1 and 2. The ROD that is being developed includes SVI mitigation at each building, as recommended in the SVI Feasibility Study through horizontal wells. Under this approach, the sub-slab is actively depressurized by imposing negative pressure under the slabs by mechanical blowers.

Building 774 and 776 SVI Evaluation (conducted in 2006, 2007, and 2008)

- Included soil vapor, sub-slab vapor, indoor air, and outdoor air sampling.
- TCE detections were reported in soil vapor, sub-slab vapor, and indoor vapor samples.

Building 785 and 786 SVI Evaluation (conducted in 2006, 2007, and 2008)

- Included sub-slab vapor, indoor air, and outdoor air sampling.
- TCE detections were reported in sub-slab vapor, and indoor air samples.

Building 774 and 776 SVI Mitigation

- The two Building 774 horizontal wells have 80-foot screens at 10 feet (ft) below ground surface (bgs) and a blower system capable of 160 cubic feet per minute (cfm).
- The two Building 776 horizontal wells will have 125 ft screens at 10 ft bgs and a blower capable of 250 cfm.
- Vapor exhaust will be through a pipe ending 3 ft. above the highest tops of the buildings.

Building 785 and 786 SVI Mitigation

- The horizontal wells at Buildings 785 and 786 will have 160 ft screens and require a blower capable of 320 cfm.
- Vapor exhaust will be through a pipe ending 3 ft. above the highest tops of the buildings.

SVI Mitigation Monitoring

- The systems will be inspected weekly for breaks, cracks, leaks, etc.
- Four indoor samples and one outdoor sample will be collected at Building 774 and 776. The samples will be collected for VOC analysis **every 6 months**. Four sub-slab samples will also be collected at each Building 774 and 776. The samples will be collected for VOC analysis **annually.**
- Four indoor samples and one outdoor sample will be collected at Building 785 and 786. The samples will be collected for VOC analysis **every 6 months**. Four sub-slab samples will also be collected at each Building 785 and 786. The samples will be collected for VOC analysis **annually**.

Annual LUC/IC Inspections

- SVI LUC/ICs, which will include deed restrictions and other administrative LUCs, such as zoning restrictions, and engineering controls, such as access restrictions, will be implemented at the buildings. The LUC/ICs will be verified annually.

Site Closure Criteria: The systems will be maintained and monitored until the SVI Mitigation OPS has been approved and until site closure and regulatory concurrence of the Apron 2 Chlorinated Plume (SD052-01) and Building 775 Chlorinated Plume (SD052-02) sites.

Proposed End Point, Metrics, and Approach:

SVI Indoor air, Outdoor, and Sub-slab sampling

- *Approach* – Conduct semiannual indoor air VOC sampling and annual sub-slab VOC sampling at four locations and semi-annual outdoor air VOC sampling at one location at each Building 774 and 776 in 2012 and 2013. Conduct semi-annual indoor air VOC sampling and annual sub-slab VOC sampling at four locations and semi-annual outdoor air VOC sampling at one location at each Building 785 and 786 in 2012 and 2013. The samples will be collected in the summer and winter. **The number of sampling locations will be optimized for 2014, 2015, and 2016**. **The number of indoor samples will be reduced to two samples collected semiannually at each building**. Additionally, **the number of sub-slab samples will be reduced to one sample collected annually at each building**. The outdoor sampling will not be optimized.
- *Rationale* - Indoor and sub-slab monitoring is included during the start-up period and O&M period to verify the effectiveness of the approach and to show that the alternative meets its objective. Indoor sampling events will be performed more frequently since the sub-slab is constantly under negative pressure in this approach and it will evaluate sub-slab vapor intrusion. Results will be reported after each sampling event and the LTM program will be reviewed for effectiveness and redundancy. It is anticipated, after three years of O&M, that the sampling will be optimized as the groundwater source is remediated and the additional SVI is mitigated.

Site #:	SD052 (Soil Vapor Intrusion System)
Projected Closure Date:	2020
Site Objective:	Optimized Exit Strategy
General Strategy:	O&M of SVI mitigation systems and monitoring.

System Inspections

- *Approach* - Conduct weekly system operation inspections and vacuum measurements.
- *Rationale* - Weekly inspections will maintain and monitor the integrity of the SVI mitigation systems

Annual LUC/IC Inspections

- *Approach* - SVI LUC/ICs will be inspected annually. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report.
- *Rationale* - maintain the integrity of the mitigation systems as well as to ensure the protectiveness of human health and the environment. SD-52 SVI Systems will be included in the 2015 Five-Year Review to evaluate the protectiveness of the remedy.

Operation and Maintenance Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Annual O&M Reports. The Reports will also include site figures in GIS format.

Five-Year Review

- SVI Mitigation will be included in the 2015 Five-Year Review. The Five-Year Review will include a summary of all 2011 to 2015 monitoring data, maintenance activities, and the annual LUC/IC inspection results.

Potential Risks and Mitigation Strategies: No OPS criteria have been set and the Air Force and regulators have yet to agree on the screening values. We will recommend continued O&M of the systems until the source of SVI is remediated. Addition controls, as such as SVI vents will be installed if the SVI mitigation systems are not functioning as anticipated.

Post-POP Activity and AF Financial Liability:

SVI Indoor air, Outdoor air, and Sub-slab sampling – Following five years of operation, it is anticipated that the SVI systems will be operating as intended. The 2015 Five-Year Review will establish a comprehensive exit strategy based on the available data. The systems will undergo quarterly O&M with effluent performance monitoring through 2020. It is reasonably expected that the 2020 Five-Year will support NFA at the SVI sites given the soil-vapor extraction nature of the SVI mitigation systems.

Annual LUC/IC Inspections and 2020 Five-Year review- LUC/ICs will be maintained to evaluate the protectiveness of the remedy. Annual inspections and reporting will continue through 2020 when the sites will undergo a Five-Year Review.

Horizontal Well Decommissioning - Following regulatory acceptance of site closure, the horizontal wells, including all well screen, riser, and aboveground piping will be decommissioned. The cost is estimated to be $40,000 or $25/foot.

Financial Liability – The estimated cost for the post POP activities is $50,000 per year for Quarterly O&M Inspections and Annual LUC/IC Inspections. An additional $4,900 will be required for the 2020 Five-Year Review. The total estimated cost is $294,900.

Site #9:	SS060 (Building 35/36) Site Closure Approved 9/9/14
Projected Closure Date:	2012 (Revised to 2014)
Site Objective:	Site Closure with Restricted Use
General Strategy:	Vegetable Oil injection and groundwater monitoring.

Understanding of Current Site Status: Building 35/36, located in the central portion of GRIFFISS, was previously used for hazardous waste storage. In 1997, a removal action was performed to remove PCB contamination at the site. During the removal action, industrial/commercial use soil cleanup objectives applied. In 2005 and 2006, hydrogen release compound® was injected at the site. In 2008, Newman zone® injection was conducted at B035MW-4. Additional injections of Newman Zone were completed in 2011 and December 2012. Site anticipated to be closed in third quarter of 2014. Additional injection event completed in December 2012.June 2013 groundwater sampling event supports a closure request and Draft Closure Report was submitted for AFCEC review 11/1/13. Final Closure Report was submitted on 1/20/14. Received review comments from NYSDOH via NYSDEC requesting an additional round of groundwater samples due to an exceedence in VC concentrations. Samples collected in April 2014 and results support site closure. A Closure Report Addendum was submitted in summer 2014 for regulatory review. Closure approval received September 9, 2014.

Groundwater Monitoring (initiated in March 2002)

- One monitoring well (B035MW-4) was sampled annually for VOCs.
- cis-1,2-DCE (13.1 micrograms per Liter [µg/L]) and vinyl chloride (3.03 µg/L) were reported at levels above NYS Groundwater Standards (5 µg/L and 2 µg/L, respectively) in April 2010.

Annual LUC/IC Inspections

- LUC/ICs were implemented at the site following closure activities in 1997. They are verified annually through LUC/IC site inspections.

Site Closure Criteria: Includes the confirmed decline of chlorinated VOC concentrations, proven effectiveness of the vegetable oil emulsion injection, and maintenance of site LUC/ICs.

Proposed End Point, Metrics, and Approach:

Groundwater Remediation

- *Approach* – **Conduct vegetable oil emulsion injection.**
- *Rationale* - Sampling performed after the Newman Zone® injection in 2008 has shown that in-situ anaerobic reductive dechlorination is occurring and that the carbon source has reached levels below the recommended minimum level of 20 to 50 mg/L for dissolved organic carbon. To stimulate the natural breakdown processes, an additional carbon application is recommended through the injection of a vegetable oil emulsion. The vegetable oil will be sheared into an emulsion with a shear pump and heated groundwater and then injected into monitoring well B035MW-4.

Groundwater Monitoring

- *Approach* - **Conduct two annual (spring round) groundwater monitoring events at monitoring well B035MW-4**. Groundwater samples will be analyzed for chlorinated VOCs and groundwater characteristics.
- *Rationale* - The sampling data is anticipated to confirm that VOC concentrations are declining and that the vegetable oil emulsion injection is effectively boosting site contamination remediation. Therefore, we will propose site closure with restrictions following the 2012 sampling event.

Annual LUC/IC Inspections

- *Approach* - The LUC/ICs will be inspected and reported annually.
- *Rationale* - The LUC/ICs will be maintained to ensure that human health and the environment are protected from the residual contamination.

Long-Term Monitoring Reporting

- We will submit all monitoring data, summaries of site activities, and recommendations to the Air Force in Long-Term Monitoring Reports. The Reports will also include site figures in GIS format.

Monitoring Well Decommissioning

- Following the acceptance of no further groundwater monitoring at the site, all four remaining monitoring wells will be decommissioned using NYSDEC approved decommissioning procedures.

Potential Risks and Mitigation Strategies: Potential risks at the site include the increase of VOC concentrations. However, it has been determined that all contaminant sources have been removed from the site so an increase appears unlikely. Additional monitoring and vegetable oil emulsion injection will be conducted if declining trends are not confirmed. Potential risks at this site also include occupant compliance with the LUC/IC. Any noncompliance results will be reported to the Air Force and the regulators.

Site #9:	**SS060 (Building 35/36) Site Closure Approved 9/9/14**
Projected Closure Date:	2012 (Revised to 2014)
Site Objective:	Site Closure with Restricted Use
General Strategy:	Vegetable Oil injection and groundwater monitoring.

Post-POP Activity and AF Financial Liability:
Annual LUC/IC Inspections – It is anticipated that closure with restricted use will be achieved at the site. Annual inspections and reporting for LUC/ICs will be required following the POP. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment. Site closure approved September 9, 2014.
Financial Liability - The yearly estimated cost for LUC/IC maintenance is $1,500.

Site #10:	**ST006 (Building 101 – UST [Yellow Sub – Battery Acid Disposal Cell])**
Projected Closure Date:	2040
Site Objective:	Status Quo (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD, which recommends SVI evaluation with any future site construction, is pending. ST006 has not been included in the 2005 and 2010 Five-Year.

Site Closure Criteria: The selected remedy is for SVI evaluation with new construction. Therefore, the site objective of maintaining the status quo is required.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct annual LUC/IC site inspections as the ROD has not been signed. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* – LUC/ICs are necessary at the site, as the remedy is currently not in place.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #10 Mod 2 Revision: Revised Technical Approach for Site ST006	**ST006 (Building 101 – UST)**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct SVI Evaluation and Risk Assessment.

Site Description
ST006 is located south of Apron 3 in the central portion of the base along the northern margin of the industrial complex. It is bounded by Hangar Road to the south, Building 100 to the east, and Apron 4 parking area to the west. Building 101 operated as an aircraft maintenance hangar. The Building 101 Area of Concern (AOC) consists of three separate areas: (1) a former 12,000-gallon reinforced fiberglass UST, known as the Yellow Submarine; (2) a former Battery Acid Disposal Pit (BADP); and (3) a former Battery Acid Drainage Pit (BADrP).

Current Conditions
The current preferred alternative is LUC/ICs. Proposed LUC/ICs are in the form of land use restrictions for industrial/commercial and re-evaluation for SVI if new construction is performed in the SVI restriction area (the BADP or BADrP location within the building). The SVI evaluation conducted at the Building 101 AOC in fall 2006 and winter 2007 included soil vapor (exterior) and sub-slab vapor (interior) (2006) and indoor and outdoor air samples (2007). Results indicate that all soil vapor, indoor, and outdoor air detections are below screening levels for industrial/ commercial use but above the screening levels for residential use. Sub-slab detections were detected above screening levels but are within one order of magnitude of the sub-slab screening levels. Since no exceedences have been reported for the indoor air samples, and the floors have been coated, no further action or evaluation of SVI is required, unless constructing within the SVI restriction area. Site Evaluation Report was submitted for NYSDEC and EPA review on September 4, 2013. Revised objective to achieve unrestricted site closure by end of 2015. Remediation equipment installed in in October 2013. System is fully operational. SVI Evaluation Report completed 9/4/13. Quarterly sampling and reporting has been initiated. Quarterly O&M Reports have been submitted for Quarters 1, 2, 3, and 4.

Site Closure Approach
The proposed approach includes implementing the remedy proposed by the pending ROD while eliminating the underlying LUC/IC driver. A comprehensive soil vapor sampling program will be conducted to identify the extent of the residual contamination. The data will be relied upon to update the SVI evaluation, evaluate the site-specific risk, and implement a soil vapor extraction (SVE) system that is capable of eliminating any residual soil vapor. We will also support a ROD Amendment or Explanation of Significant Differences (ESD) to achieve site closure. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.

Site Closure Activities and Assumptions

- **Collection of 10 sub-slab vapor samples, two indoor air samples, and one outdoor air sample.** The sub-slab vapor and indoor air samples will be collected in the proposed SVI restriction area. The two outdoor samples will be collected on the northern and southern sides of the building. During sampling, all products, such as cleaning solvents and other volatiles within the sampling area, will be noted and used in the analysis of the results.
- **Installation of SVE Well:** During the SVI evaluation stage one test SVE well will be installed. This SVE well will be reutilized if the project continues with installation of an SVE system.
- **LUC/IC Inspections**: CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.
- **Human Health Risk Assessment**: CAPE will complete a Human Health Risk Assessment to determine if there is an unacceptable risk for residential use at the site.

Conduct Human Health Risk Assessment using sampling results. A full-scale SVE System will be installed at the site if the Human Health Risk Assessment finds that there are unacceptable risks for residential use at the site. The SVE system will initially be deployed to gather sufficient data regarding radius of influence and contaminants removal effectiveness. The data will be used to support incorporating a full-scale system in a ROD Amendment.

Site #10 Mod 2 Revision: Revised Technical Approach for Site ST006	**ST006 (Building 101 – UST)**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct SVI Evaluation and Risk Assessment.

Site Closure Criteria
Site closure will be recommended if no exceedences of risk-based standards (as agreed upon by the Air Force and regulators) are reported and if the Human Health Risk Assessment finds that there are no unacceptable risks for residential use at the site.

Option 2 (PWS) ***Note: Option 2 authorized under Contract Modification 2***
Results from the 2013 Site Closure Evaluation showed a potential for unacceptable risk, primarily due to TCE, exists for indoor air inhalation resulting from SVI under a residential scenario. To remediate this unacceptable risk, an SVE system was installed subsequent to the system trial period on October 7, 2013. The SVE system is composed of one vertical well with a total combined screen length of 5 feet (3 to 8 feet below grade surface [bgs]), one vacuum pump capable of a flow rate of 20 actual cubic feet per minute (acfm), a vapor treatment system, and three vapor monitoring points (VMPs). Extracted soil vapor is treated using two 200-pound granular activated carbon (GAC) drums.. The VMPs were also installed on October 7, 2013 and are positioned 10 feet, 20 feet, and 30 feet away from the extraction well to collect performance monitoring data. The baseline sampling event was conducted on October 17, 2013 and October 22, 2013 and consisted of sub-slab vapor, indoor air, outdoor air sampling. All samples were analyzed for VOCs using the USEPA Method TO-15. An influent sample was also collected following system start-up on October 22, 2013. That sample was collected from a sampling port on the exhaust stack prior to the vapor treatment system. Results showed TCE concentrations above the sub-slab vapor screening level of 70 µg/m3 at all three VMPs. The concentrations ranged from 76 µg/m3 to 540 µg/m3. Exceedances reported in the indoor air or outdoor air samples are attributed to chemicals currently used in the building to perform maintenance, repair and overhaul of airplanes. Given previous SVI results at the site and the results from other SVE systems at the former Griffiss AFB, it is assumed that the operation of the system will conclude in the second quarter of 2015 followed by rebound monitoring. If SVI sampling results are within the acceptable range for residential use (based on Human Health Risk Assessment), site closure will be recommended. System O&M and quarterly sampling and reporting will continue.

Potential Risks and Mitigation Strategies
The SVE system design was based on previous site data and the 2012 SVI evaluation and risk assessment. There was a potential risk that the designed system may not adequately extract the necessary volume to eliminate soil vapor at the site within the POP. Therefore, during the start-up period of the system, we will monitor the effectiveness of the system through vapor monitoring and radius of influence testing. Presently it appears that the system has been effective in treating remaining site contaminants. Additional SVE wells could still be installed to increase the efficiency of the system, if needed. The initial vacuum blower will be designed to achieve a higher flow rate, if necessary.

Site #11:	SS008 (Building 112 – PCB Dump Area/South Side-PCB Trans Leak, Roof [Former SS-19])
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD was signed by the EPA on September 27, 2001. LUC/ICs include groundwater and soil restrictions and land-use restrictions for industrial/commercial/non-residential use. SS008 has been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct annual LUC/IC site inspections. Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *Rationale* - The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *LUC/IC Evaluation* - We will not propose closure at the site as site contamination included PCBs and the RA soil cleanup objectives were for commercial/ industrial values (1 ppm PCB for 0-1 ft bgs and 10 ppm for deeper than 1 ft. The unrestricted use soil cleanup objective for PCBs is 0.1 ppm.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #12:	**DP011 (Building 3 Drywell) Closure approved 6/18/13**
Projected Closure Date:	2012 (Revised to 2013, Final Closure Report submitted 1/15/13.
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Soil and groundwater sampling.

Understanding of Current Site Status: The ROD was signed by the EPA on March 17, 2005 with the selected remedy of LUC/ICs. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. DP011 has been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. Final Closure Report submitted to NYSDEC and EPA on 1/15/13. Closure approval and deletion of deed restrictions approved by EPA on June 18, 2013. Site closure was approved by EPA and NYSDEC on June 18, 2013.

Site Closure Criteria: Groundwater and soil COCs at levels below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* – **Closure with Unrestricted Use**. We will **conduct additional soil sampling and groundwater sampling** at existing monitoring well, 3VMW-1, to evaluate the LUC/IC at the site.
- *Rationale* - The LUC/IC area is located on the eastern side of Building and is approximately 20 ft by 20 ft. Using the sampling data, we will make the recommendations to the Air Force and Regulators to remove LUC/ICs at the site. Review of the previous investigations showed that VOC, SVOCs, and metals were detected in groundwater samples with only SVOCs and metals above the most stringent criterion. The human health risk assessment indicated that, as a result of the drywell removal and excavation, soil contamination in the area was minimal.

Potential Risks and Mitigation Strategies: This site is located in a secure Air Force area and access may not be granted. Additionally the close proximity of the site to the foundation of Building 3 may prohibit soil excavation if soil levels are identified above unrestricted use soil cleanup objectives. Therefore, if groundwater or soil COC levels are above unrestricted use soil cleanup objectives, the LUC/ICs will be maintained. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.

Post-POP Activity and AF Financial Liability: The site will require No Further Action.

Site #13:	DP012 (Building 301 Former Entomology Shop Drywell)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed by the EPA on September 30, 1999. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. DP012 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW restriction deletion requests submitted 3/1/12. EPA approval received on 6/12/12. NYSDEC approval received 6/6/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to **conduct the annual LUC/IC site inspections for non-residential use** and **to submit an ESD to recommend the deletion of groundwater restrictions at the site**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The ESD to delete the groundwater restrictions will be submitted to the regulators based on the latest groundwater sampling data (2004) and the acceptance of no further sampling at the site. Previous groundwater sampling in 2003 and 2004 showed two metals (sodium and iron) above NYS Groundwater SCGs, but these metals are indicative of base-wide background conditions, as shown in the 1994 RI. Therefore, no further groundwater monitoring was recommended and monitoring ceased.
- *LUC/IC Evaluation* - We will not propose closure at the site, as a Phase II investigation performed at DP012 in 2010 indicated pesticides. The pesticide, dieldrin, was detected above the unrestricted use soil cleanup objectives, but below restricted (commercial) use soil cleanup objectives. Commercial construction at the site began in the summer of 2010, which limits further investigation and removal.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators. Additionally, if the ESD is not accepted, groundwater restrictions will continue to be maintained.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #13 Mod 2 Revision: Revised Technical Approach for Site DP012	**DP012 (Building 301 Former Entomology Shop Drywell)**
Projected Closure Date:	2015
Revised Site Objective:	**Site Closure**
General Strategy:	Confirming the presence/absence of drywell east of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use soil cleanup objectives (SCOs).

Site Description
Building 301 formerly housed the Entomology Shop, which provided pest control for the base. A drywell was reportedly located in the grassy area at the southeast corner of the building and south of an idle air conditioning unit. The drywell was reportedly a 4-foot-square, 8-foot-deep pit filled with stone and gravel. It was used from the 1940s – 1982 to dispose of small quantities of excess pesticides and rinse water from pesticide applications. Previous investigations have not been able to locate this drywell.

Current Conditions
The Remedial Investigation (RI) for DP012 was completed in 1994. Results showed the presence of VOCs, semi-volatile organic compounds (SVOCs), pesticides, and metals in soils at the site. A risk assessment was also conducted for the RI. For human health, contaminants in the soil and groundwater were within the lower end of the acceptable EPA target risk range for industrial and commercial users. The ecological assessment concluded that there are no complete exposure pathways for ecological receptors.
The ROD for DP012 was signed by the EPA on September 30, 1999. As a result of residual soil and groundwater contamination, LUC/ICs at the site include land-use restrictions commercial/administrative/non-residential use. Following the ROD, LTM for groundwater was conducted at the site from 2003–2004. Groundwater was deemed as not contaminated, and monitoring ceased at the site in 2004 with regulatory approval. Removal of the groundwater restriction at the site was accepted by the EPA on June 7, 2012. NYSDEC acceptance is pending.
DP012 has also been included in the 2005 and 2010 5-Year Reviews, and the remedy was found to be protective of human health and the environment. A Phase II Environmental Site Assessment performed at DP012 in 2010 indicated pesticides above 60 New York Codes, Rules and Regulations (NYCRR) Part 375 Residential SCOs at soil samples collected from 0–4 feet bgs. The pesticide, dieldrin, was detected above the residential use SCOs but below restricted (commercial) use SCOs. Groundwater restriction deletion request made 3/1/12. EPA approval received on 6/12/12 and NYSDEC approval received on 6/6/12.Site Investigation completed and report submitted as final on 12/11/13 Draft Closure Report submitted to NYSDEC and EPA on 10/17/14. Review comments due by 12/1/14. The Final Site Closure Report was submitted 12/12/14. Additional comments received on 1/9/15 from NYSDOH via NYSDEC. Responses to comments sent 1/20/15. Closure is pending an anticipated by end of the first quarter 2015. EPA has no comments on the report and approves closure as dependent on NYSDEC closure approval.

Site Closure Approach
Proposed to confirm the presence/absence of the drywell and to conduct additional soil sampling within the LUC/IC site boundary. If present, the drywell and any associated contaminated soil will be removed. We will also support the necessary ROD Amendments/ESDs to close the site.

Site Closure Activities and Assumptions

- **Geophysical Investigation** – The geophysical technology (for example, ground penetrating radar) investigation to locate the drywell will be conducted based on the presumed location of the drywell as provided in the Base wide Environmental Baseline Survey.
  - If the drywell is absent, we will continue the proposed soil sampling activities and document the confirmed drywell absence.
- **Drywell Removal** – If the drywell is present, the drywell will be removed followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of the excavation. Analysis will include metals, pesticides, and VOCs. These results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be performed, if required, until soil concentrations are below NYCRR Part 375 Residential use SCOs. The extent of the drywell excavation is estimated to be 22 feet by 22 feet and to approximately 8 feet bgs, for an approximate volume of 145 cubic yards (CY). Following the excavation, full site restoration will be performed**. Site closure will be recommended following site restoration.**
- **Soil Investigation** – If the drywell is not found, we will collect six soil samples from three soil borings within the LUC/IC site boundary at DP012. Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, and 4–8 feet bgs from each boring. Based on the data from the Phase II assessment, the samples will be analyzed for pesticides and will be compared to NYCRR Part 375 Residential use SCOs.

Site #13 Mod 2 Revision: Revised Technical Approach for Site DP012	**DP012 (Building 301 Former Entomology Shop Drywell)**
Projected Closure Date:	2015
Revised Site Objective:	**Site Closure**
General Strategy:	Confirming the presence/absence of drywell east of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use soil cleanup objectives (SCOs).

- If soil sample results are below NYCRR Part 375 Residential use SCOs, site closure will be recommended.

- **Soil Excavation** – If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of the excavation. Analysis will include chemicals of concern (COCs) identified during the soil investigation. Sampling results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavations will be performed, if required, until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigations, the extent of the excavation is projected to be up to **350 CY**. **Following the excavation, full site restoration will be performed and site closure will be recommended.**
- **ROD Amendment/ESD.** The ROD has been finalized and signed; however, a ROD amendment/ESD will be required as a result of the proposed activities, which we will also support. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.
- CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- If the drywell is absent, site closure will be recommended if the results from the soil investigation show chemical of concern (COC) concentrations below NYCRR Part 375 Residential use SCOs.
- If the drywell is present, site closure will be recommended if the confirmatory sampling results and the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies:

Since the site is located within a redeveloped business park, it is located in close proximity to newly developed/remodeled facilities and subsurface features (utilities) that may limit excavation. As a result, additional activities, including the rerouting or manipulation of surface and subsurface features to remove contamination, may be required to achieve site closure. The site features include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). The activities would require close coordination with utility managers, landowners and occupants, and the City of Rome. However, it is assumed that the contamination is isolated to the LUC/IC boundary and does not extend to these features.

Site #14:	**DP013 (Building 255 Two Drywells)**
Projected Closure Date:	2040 (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
Site Objective:	Optimized Exit Strategy (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 27, 2001. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. DP013 has also been included in the 2005 and 2010 Five-Year Reviews, and the remedy was found to be protective of human health and the environment.GW Restriction Deletion request submitted on 3/1/12. EPA approval received 5/16/12. NYSDEC approval received 4/24/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to **conduct annual LUC/IC site inspections for non-residential use** and **recommend the deletion of groundwater restrictions at the site based on the EPA-approved ESD**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. Groundwater sampling was conducted for five sampling rounds in 2001 and 2002 and two metals (iron and sodium) were reported above NYS Groundwater SCGs, which are indicative of base-wide background conditions as shown in the 1994 RI. The ESD to remove the requirement to monitor groundwater at the site was signed by the EPA on September 26, 2003.
- *LUC/IC Evaluation* - We will not propose closure at the site as one of the two drywells, which were the potential source of site contamination, was not located or excavated. Additionally, review of the latest soil sampling data showed arsenic above unrestricted use soil cleanup objectives at two locations, but below restricted (commercial) use soil cleanup objectives. Due to the drywell not being located and elevated arsenic levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not cost-effective or feasible due to current commercial site conditions. Therefore, the land-use restriction for non-residential use will be maintained.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #14 Mod 2 Revision: Revised Technical Approach for Site DP013	**DP013 (Building 255 Drywells)**
Projected Closure Date:	2015
Revised Site Objective:	**Site Closure**
General Strategy:	Confirm the presence/absence of drywells east of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

Site Description
The Building 255 Drywells AOC is located in the west-central portion (Parcel F3A) of the former Griffiss AFB. Building 255 was a former vehicle maintenance shop that included several drywells and is located in the area referred to as Tin City. This building has been demolished. One drywell was removed west of the former building in 1998, and two drywells are suspected to be present east of the former building.

Current Conditions
Historical soil and groundwater (RI) sampling showed VOCs, SVOCs, pesticides, PCBs, and metals detections. A risk assessment was conducted for the RI. For human health, contaminants in the soil and groundwater were within the lower end of the acceptable EPA target risk range for industrial and commercial users. The ecological assessment concluded that the potential for adverse effects to terrestrial ecological receptors was insignificant. An Interim Remedial Action was performed at the site in 1998, which consisted of asphalt demolition, removal and disposal of the drywell west of the building, and soil excavation. Confirmatory sampling conducted in the soil excavation indicated clean-up goals had been met as stated in the Closure Certification Report (Ocuto Blacktop and Paving Environmental Services, March 2001). The second and third drywells are assumed to be located to the east of the building but have not been located in previous investigations.
The ROD was signed on September 27, 2001. As a result of residual soil contamination, LUC/ICs at the site include land-use restrictions for industrial/commercial/non-residential use. Following the ROD, LTM for groundwater was conducted at the site from 2001–2002. Groundwater was deemed as not contaminated and monitoring ceased at the site in 2002 with regulatory approval. 2. DP013 has also been included in the 2005 and 2010 5-Year Reviews and the remedy was found to be protective of human health and the environment. Revised site objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12 Annual LUC/IC Inspections & Reporting will continue until closure objective is met which is estimated by 2015. SI Report and Closure Report combined and submitted as final on 4/28/14. Received comments on 5/8/14 from NYSDOH via NYSDEC that there was some concern regarding chromium levels in soil. RTCs in were submitted 7/11/14 and additional soil samples collected from 0-2 feet bgs interval as requested. Samples were submitted for Chromium and Hexavalent Chromium analysis. An addendum to Closure Report was submitted on 11/10/14. Additional comments were received from NYSDOH via NYSDEC on 1/9/15. RTCs submitted on 1/21/15. Closure pending but anticipated by close of first quarter 2015.

Site Closure Approach
We propose to confirm the presence/absence of the drywells at this site and to conduct additional soil sampling with the LUC/IC site boundary. If present, the dry wells and any associated contaminated soil will be removed. We will also support the necessary ROD Amendments/ESDs to close the site.

Site Closure Activities and Assumptions
Drywell West of the Former Building 255:
Request closure at the drywell site west of former building. This drywell was removed in 1998, and residual contamination was excavated. All confirmatory sampling results were below cleanup objectives. The confirmatory sampling results were also compared to the NYCRR Part 375 Residential use SCOs. All concentrations were below the NYCRR Part 375 Residential use SCOs except for chromium. However, the concentrations of chromium were attributed to base wide background conditions. In addition, the groundwater monitoring has confirmed the absence of groundwater contamination at the site. An ESD was approved by the EPA deleting the groundwater investigation requirement at the site.
Potential Risks and Mitigation Strategies for drywell site west of the former building: If the regulatory agencies do not approve closure based on the previous data, we will conduct sampling (four borings, three samples each) to confirm the absence/presence of contamination above NYCRR Part 375 residential use SCOs. If results are above the NYCRR Part 375 Residential use SCOs from this sampling, we will propose excavation in conjunction with the drywell site east of the former building. A 20-by-20-foot excavation was conducted at the site in 1999. Any additional excavation at the site is assumed to be significantly smaller.

Site #14 Mod 2 Revision: Revised Technical Approach for Site DP013	**DP013 (Building 255 Drywells)**
Projected Closure Date:	2015
Revised Site Objective:	**Site Closure**
General Strategy:	Confirm the presence/absence of drywells east of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

The site is not developed; however, excavation may be limited by a parking lot and utilities near the site. As a result, additional activities may be required to achieve site closure. Additional activities include the rerouting or manipulation of surface and subsurface features to remove contamination. The site features may include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). The activities would require close coordination with utility managers, landowners and occupants, and the City of Rome. However, it is assumed that the contamination is isolated to the LUC/IC boundary and does not extend to these features.

Drywells East of the Former Building 255:

- **Geophysical Investigation** – The geophysical technology (for example, ground penetrating radar) investigation to locate the drywells will be conducted based on the presumed location of the drywells as provided in the Base wide Environmental Baseline Survey.
  - If drywells are absent, continue proposed soil sampling activities and document confirmed drywell absence.
- **Drywell Removal** – If drywell is present, removal of the drywell will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of the excavation. Analysis would include metals, pesticides, and VOCs. These results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed until soil concentrations are below NYCRR Part 375 Residential use SCOs. The extent of each drywell excavation is projected to 22 feet by 22 feet and to approximately 8 feet bgs (145 CY). Following the excavation, full site restoration will be performed**. Site closure will be recommended following site restoration.**
- **Soil Investigation** – If the drywells are not found, we will collect 15 soil samples from five soil borings within the LUC/IC site boundary at DP013. Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, and 4–8 feet bgs from each boring. Confirmatory samples will be analyzed for VOCs and metals. All results will be compared to NYCRR Part 375 Residential use SCOs.
  - If soil sample results are below NYCRR Part 375 Residential use SCOs, site closure will be recommended.
- **Soil Excavation** - If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted followed by five confirmatory composite samples from the four walls and bottom of the excavation. Analysis will include COCs identified during the soil investigation. Sampling results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be performed if required until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigations and the number of drywells associated with this site, the extent of the excavation is projected to be up to 350 CY. Following the excavation, full site restoration will be performed and site closure will be recommended.
- **ROD Amendment/ESD.** The ROD for this site has been finalized and signed; however, we will also support a ROD amendment/ESD that will be required as a result of the proposed activities. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.
- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- If drywells are absent, site closure will be recommended if the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs
- If drywells are present, site closure will be recommended if the confirmatory sampling results and the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies:

Since the sites are located within a redeveloped business park, they are located in close proximity to newly developed/remodeled facilities and subsurface features (utilities) which may limit excavation. As a result, additional activities, including the rerouting or manipulation of surface and subsurface features to remove contamination, may be required to achieve site closure. The site features include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). The activities would require close coordination with utility managers, landowners and occupants, and the City of Rome. However, it is assumed that the contamination is isolated to the LUC/IC boundary and does not extend to these features.

Site #15:	DP015 (Building 219 Drywell)
Projected Closure Date:	2040 (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
Site Objective:	Optimized Exit Strategy (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 30, 1999. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential industrial/commercial/non-residential use. DP015 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW Restriction Deletion request submitted 3/1/12. EPA approval received 6/7/12. NYSDEC approval received 4/24/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose **to conduct the annual LUC/IC site inspections for non-residential use** and **recommend the deletion of groundwater restrictions at the site based on the EPA approved ESD**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. Groundwater sampling was conducted for five sampling rounds in 2001 and 2002 and two metals (iron and sodium) were reported above NYS Groundwater SCGs, which are indicative of base-wide background conditions as shown in the 1994 RI. The ESD to remove the requirement to monitor groundwater at the site was signed by the EPA on September 26, 2003.
- *LUC/IC Evaluation* - We will not propose closure at the site as the associated drywell, which is the potential source of site contamination, was not located or excavated. Additionally, review of the latest soil sampling data showed metals (chromium, lead, and manganese) and SVOCs (benzo(a)pyrene) above unrestricted use soil cleanup objectives, but below restricted (commercial) use soil cleanup objectives. Due to the drywell not being located and metals and SVOCs levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not cost effective or feasible due to current commercial site conditions. Therefore, the land-use restriction for non-residential use will be maintained.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #15 Mod 2 Revision: Revised Technical Approach for Site DP015	**DP015 (Building 219 Drywell)**
Projected Closure Date:	2015
Revised Site Objective:	**Site Closure**
General Strategy:	Confirm the presence/absence of drywell south of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

Site Description
The Building 219 Drywell AOC, located in the west-central portion of the Griffiss AFB (Parcel F3A), was used as the Electrical Power Production Shop. Surface water run-off drains into the Mohawk River through the base storm drainage system. One drywell at the site was used for the disposal of liquid wastes (battery acid, glycol, floor wash-water) and reportedly located south of the building. The drywell was not detected during surface geophysical surveys performed in 1993 and 1994 during the RI.

Current Conditions
Soil and groundwater samples were collected during the RI conducted in 1994. Soil sampling results showed SVOCs and metals above applicable RI criteria. Additionally, the drywell was not detected during surface geophysical surveys performed in 1993 and 1994 during the RI. A risk assessment was also conducted for the RI. For human health, contaminants in the soil and groundwater were within the lower end of the acceptable EPA target risk range for industrial and commercial users. The ecological assessment concluded that the potential for adverse effects to terrestrial ecological receptors was considered to be insignificant. The ROD was signed on September 30, 1999. As a result of residual soil and groundwater contamination, LUC/ICs at the site include land-use restrictions for industrial/ commercial/non-residential use. Following the ROD, LTM (groundwater) was conducted at the site from 200–2002. Groundwater was deemed as not contaminated and monitoring ceased at the site in 2002 with regulatory approval. DP015 has also been included in the 2005 and 2010 5-Year Reviews and the remedy was found to be protective of human health and the environment. Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12. Annual LUC/IC Inspections & Reporting will continue until closure objective is met. Final Closure Report submitted on 10/18/13 to NYSDEC and EPA. Received review comments very late from NYSDOH via NYSDEC on 6/9/14. RTCs sent to NYSDEC on 7/11/14. Additional soil samples collected from the 0-2 foot bgs interval as requested. All analytical results supported site closure and the revised Closure Report submitted to NYSDEC and EPA on 11/6/14. Regulatory reviews were to be completed by 12/6/14. No comments received to date. Closure approval is pending and expected by the close of the first quarter 2015.

Site Closure Approach
We propose to confirm the presence/absence of the drywell and to conduct additional soil sampling with the LUC/IC site boundary. If present, the drywell and any associated contaminated soil will be removed. We will also support the necessary ROD Amendments/ESDs to close the site.

Site Closure Activities and Assumptions

- **Geophysical Investigation** – The geophysical technology (for example, ground penetrating radar) investigation to locate the drywells will be conducted based on the presumed location of the drywell as provided in the Base wide Environmental Baseline Survey.
  - If the drywell is absent, we will continue proposed soil sampling activities and document the confirmed drywell absence.
- **Drywell Removal** – If the drywell is present, removal of the drywell will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of composite samples from the four walls and bottom of the excavation (five samples). Analysis would include metals, pesticides, and VOCs. These results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed until soil concentrations are below NYCRR Part 375 Residential use SCOs. The extent of the drywell excavation is projected to 22 feet by 22 feet and to approximately 8 feet bgs (145 CY). Following the excavation, full site restoration will be performed**. Site closure will be recommended following site restoration.**
- **Soil Investigation** – If the drywell is not found, we will collect 18 soil samples from six soil borings within the LUC/IC site boundary at DP015. Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, and 4–8 feet bgs from each boring. The confirmatory samples will be analyzed for metals at DP015. All results will be compared to NYCRR Part 375 Residential use SCOs.
  - If soil sample results are below NYCRR Part 375 Residential use SCOs, site closure will be recommended.
- **Soil Excavation** – If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted

Site #15 Mod 2 Revision: Revised Technical Approach for Site DP015	DP015 (Building 219 Drywell)
Projected Closure Date:	2015
Revised Site Objective:	Site Closure
General Strategy:	Confirm the presence/absence of drywell south of the former building using geophysical technology. Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

followed by confirmatory soil sampling. The confirmatory sampling will consist of composite samples from the four walls and bottom of the excavation (five samples). Analysis will include COCs identified during the soil investigation. Sampling results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed if required until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigations the extent of the excavation is projected to be up to 250 CY at the Building 219 site. Following the excavation, full site restoration will be performed and site closure will be recommended.

- **ROD Amendment/ESD.** The ROD for this site has been finalized and signed; however, a ROD amendment/ESD will be required as a result of the proposed activities, which we will also support. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.
- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- If the drywell is absent, site closure will be recommended if the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs
- If the drywell is present, site closure will be recommended if the confirmatory sampling results and the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies

Since this site is located within a redeveloped business park, it is located in close proximity to newly developed/remodeled facilities and subsurface features (utilities) which may limit excavation. As a result, additional activities, including the rerouting or manipulation of surface and subsurface features to remove contamination, may be required to achieve site closure. The site features include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). The activities would require close coordination with utility managers, landowners and occupants, and the City of Rome. However, it is assumed that the contamination is isolated to the LUC/IC boundary and does not extend to these features. The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators. Additionally, if the ESD is not accepted, groundwater restrictions will continue to be maintained.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.

Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #16:	**SS017 (Lot 69 – Former Hazardous Waste Storage Area)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on March 17, 2005. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. SS017 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW Restriction Deletion request made 3/1/12. NYSDEC approval received 4/24/12. EPA approval received 6/7/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct the annual LUC/IC site inspections for non-residential use and to submit an ESD to recommend the deletion of groundwater restrictions at the site. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The ESD, to delete the groundwater restrictions, will be submitted to the regulators based on the last groundwater sampling data and the acceptance of no further sampling at the site. The site was sampled for groundwater for three consecutive annual sampling rounds from 2002-2004 and metals were reported above NYS Groundwater SCGs, which are indicative of base-wide background conditions as shown in the 1994 RI. Therefore no further groundwater monitoring was recommended and monitoring ceased.
- *LUC/IC Evaluation* - We will not propose closure at the site, as site contamination included PCBs and the RA soil cleanup objectives were for commercial/ industrial values (1 ppm PCBs from 0-1 ft bgs and 10 ppm for greater than 1 ft bgs. The unrestricted use soil cleanup objective value for PCBs is 0.1 ppm.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #17:	**DP022 (Building 222 – Battery Acid Disposal Pit)**
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 27, 2001. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. DP022 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW Restriction Deletion request made 3/1/12. NYSDEC approval received 4/24/12. EPA approval received 5/16/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to **conduct the annual LUC/IC site inspections for non-residential use** and **recommend the deletion of groundwater restrictions at the site based on the EPA approved ESD**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. Groundwater sampling was conducted for five sampling rounds in 2001 and 2002 and two metals (iron and sodium) were reported above NYS Groundwater SCGs, which is indicative of base-wide background conditions as shown in the 1994 RI. The ESD to remove the requirement to monitor groundwater at the site was signed by the EPA on September 26, 2003.
- *LUC/IC Evaluation* - We will not propose closure at the site as the associated drywell, which was a potential source of site contamination, was not located or excavated. Additionally, review of the latest soil sampling data showed lead above unrestricted use soil cleanup objectives at one location, but below restricted (commercial) use soil cleanup objectives. As a result of the lead levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not cost-effective or feasible due to current commercial site conditions. Therefore, the land-use restriction for non-residential use will be maintained. It should also be noted that the previous excavation and contamination is located within Building 222, which is now used for office space.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #18:	**SS023 (Building 20 Locomotive Round House – Contaminated Soil) Site Closure Approved 6/18/13**
Projected Closure Date:	2012 (Revised to 2013. Final Closure Report Submitted – Closure formally approved by EPA on June 18, 2013)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Recommend groundwater restriction deletion and soil sampling to support land-use restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 27, 2001. LUC/ICs include groundwater and soil restrictions and land-use restrictions for industrial/commercial/non-residential use and to protect remedial operations. SS023 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. Final Site Closure Report submitted March 2012. EPA email approval received 2/12/13. NYSDEC indicated that they were in agreement with EPA site closure approval. Formal site closure approval received on June 18, 2013.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* – **Closure with Unrestricted Use**. We propose **to conduct additional soil sampling** to determine the necessity of the site LUC/ICs. In addition, we will **submit an ESD to the regulators to delete the groundwater restrictions.**
- *Rationale* - Endpoint soil sampling data from the RA for Building 20 was reviewed. Based on excavation endpoint sampling results, no COCs exceeded unrestricted use soil cleanup objectives. Therefore, additional soil samples will be collected to confirm the absence of contamination above unrestricted use soil cleanup objectives. Groundwater monitoring from 2001-2004 showed SVOCs and metals and metals exceedences. These COCs were attributed to suspended solids in the groundwater samples. Therefore, no further monitoring was recommended by the Air Force and was accepted by the regulators.

Potential Risks and Mitigation Strategies: The AOC boundary is within a maintenance bay of a train restoration facility. It is possible, given the current building use, that the current occupant may have exposed the site to additional contamination, including diesel and hydraulic fluids. If additional contamination is reported, the previous results will be used for comparison to eliminate any future liability to the Air Force. Because the site is located within the building, no soil excavation will be permitted if soil levels are identified above unrestricted use soil cleanup objectives. Therefore, if soil COC levels are above unrestricted use soil cleanup objectives, the LUC/ICs will be maintained. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.

Post-POP Activity and AF Financial Liability: The site will be No Further Action. If it is determined that LUC/ICs should remain in place, it will cost approximately $1,500 to perform inspections and reporting.

Site #19:	**SS024 (Fire Demonstration Area – Contaminated Soil)**
Projected Closure Date:	2040 (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
Site Objective:	Status Quo (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD was signed on September 30, 1999. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. SS024 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct the annual LUC/IC site inspections. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* - We will not propose closure of the site. Review of the latest soil sampling data showed dieldrin, metals, and SVOCs above unrestricted use soil cleanup objectives, but below restricted (commercial) use soil cleanup objectives. As a result of COC levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not feasible due to current airport site conditions. The airport is currently operational and is secured by the Transportation Security Administration (TSA).

Potential Risks and Mitigation Strategies: The potential risk at this site is the occupant not being in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #19 Mod 2 Revision: Revised Technical Approach Site SS024	**SS024 (Fire Demonstration Area [FDA])**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

Site Description
The FDA is located north of Buildings 101 and 100, between Taxiways 17 and Apron 3 in Parcel A1A. Surface water run-off discharges into the Mohawk River. The FDA was used from 1974–1992 for fire demonstrations. From 1974–1987, fuels and other flammable materials were ignited on bare ground, and from 1987 until its closure in 1992, fuels were ignited in a metal trough.

Current Conditions
Groundwater sampling and a soil gas survey were performed in 1994. During the RI, VOC concentrations were not found in exceedence of applicable standards or guidance values. Four soil borings were used at the FDA AOC to collect 32 subsurface screening samples and 18 confirmatory samples in late 1994 and early 1995. The presence of VOCs, SVOCs, pesticides, PCBs, dioxins, metals, cyanide, and petroleum hydrocarbons were reported. However, not all detections exceeded the guidance values. Soil exceedences of applicable RI criteria were limited to two SVOCs, one pesticide, one PCB, and five metals. One pesticide (alpha-BHC) was detected exceeding guidance values, but the origin of this contamination is unknown. A risk assessment was also conducted for the RI. For human health, contaminants in the soil and groundwater were within the lower end of the acceptable EPA target risk range for industrial and commercial users. The ecological assessment concluded that the potential for adverse effects to terrestrial ecological receptors was considered to be insignificant.
The ROD was signed on September 30, 1999. As a result of groundwater and soil data from the RI, LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. SS024 has also been included in the 2005 and 2010 5-Year Reviews, and the remedy was found to be protective of human health and the environment. Revised per 9/12 Contract Mod to change site objective to site closure by 2015 with unrestricted reuse. Annual LUC/IC Inspections & Reporting will continue until closure objective is met which is estimated by 2015. . Site Investigation and Closure Report submitted on 3/31/14 to NYSDEC and EPA. Received review comments late from NYSDOH via NYSDEC on 5/8/14 with concern regarding Dieldrin in soils. RTCs sent to NYSDEC on 7/11/14. Eight additional soil samples collected from the 0-2 foot bgs interval as requested. All analytical results supported site closure and the revised Closure Report submitted to NYSDEC and EPA on 11/6/14. Regulatory reviews were to be completed by 12/6/14. No comments received to date. Closure approval is pending and expected by the close of the first quarter 2015.

Site Closure Approach
We propose to conduct a soil investigation and excavation at the site. In addition, we will request removal of the groundwater restriction at the site. We will also support the necessary ROD Amendment/ESD to close the site.

Site Closure Activities and Assumptions

- **Soil Investigation – Collect soil samples from six borings within the LUC/IC site boundary**. Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, and 4–8 feet bgs from each boring. Based on the results of previous investigations at the site, the samples will be analyzed for SVOCs, pesticides, and metals.
  - If soil sample results are below NYCRR Part 375 Residential use SCOs and groundwater sample results are below New York State (NYS) Groundwater Standards (NYDEC, June 1998), site closure will be recommended.
- **Soil Excavation** – If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of the excavation. The samples will be analyzed for any COC identified during the soil investigation and results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigation results, the extent of the excavation is projected to be up to 300 CY. Following the excavation, full site restoration will be performed and site closure will be recommended.
- **Site Background Study** – Collect soil samples from eight borings to approximately 8 feet bgs in areas adjacent to the LUC/IC site boundary. Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, 4–8 feet bgs from each boring. Based on the results of previous investigations at the site, the samples will be analyzed for SVOCs, pesticides, and metals.

Site #19 Mod 2 Revision: Revised Technical Approach Site SS024	**SS024 (Fire Demonstration Area [FDA])**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination. Conduct excavation of residual soil contamination to residential use SCOs.

- The site is located within the airport. Additional COCs not associated with the site may be present at the site as a result of the activities around the site.

- **Request removal of groundwater restriction at the site.** The RI groundwater data showed that all detections were below NYS Groundwater Standards. In addition, the monitoring well at the site was decommissioned with EPA and NYSDEC approval.
- **ROD Amendment/ESD.** The ROD for the FDA has been finalized and signed; however, a ROD Amendment/ESD will be required as a result of the proposed activities which we will also support**.** This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.
- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- Site closure will be recommended if the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.
- Site closure will be recommended if the COC concentrations are above the NYCRR Part 375 Residential use SCOs but are similar to the background study results.
- If an excavation is required at the site, site closure will be recommended if the confirmatory sampling results show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies:

The site is located within an active airfield between two taxiways which may limit excavation. As a result, additional activities, potentially including excavation into the taxiways to remove contamination, may be required to achieve site closure. The activities would require close coordination with the airfield authority. However, it is assumed that the contamination does not extend to the taxiways.

Site #20:	SS025 (Building T-9 Storage Area – Contaminated Soil/Groundwater)
Projected Closure Date:	2040
Site Objective:	Optimized Exit Strategy
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 27, 2001. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. SS025 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW Restriction Deletion request made 3/1/12. NYSDEC approval received 6/6/12. EPA approval received 2/12/13. Formal approval letter received from EPA on June 18, 2013 for groundwater restriction deletions.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to **conduct the annual LUC/IC site inspections for non-residential use** and to **submit an ESD to recommend the deletion of Groundwater restrictions at the site**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The ESD, to delete the groundwater restrictions, will be submitted to the regulators based on the last groundwater sampling data and the acceptance of no further sampling at the site. The site groundwater was sampled for five consecutive rounds between 2003 and 2004 and one SVOC was detected slightly above the NYS Groundwater SCGs. Therefore, no further groundwater monitoring was recommended and monitoring ceased. The NYSDEC closed Spill number 9702173 on September 24, 2004.
- *LUC/IC Evaluation* - We will not propose closure at the site as the latest soil sampling results show SVOCs (benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, and chrysene) above unrestricted use soil cleanup objectives, but below restricted (commercial) use soil cleanup objectives. In addition, the soil contamination above unrestricted use soil cleanup objectives is wide spread at the site. As a result of these COC levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not feasible due to current commercial site conditions. It should be noted that an olive oil bottling plant has been constructed on part of the AOC.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators. Additionally, if the ESD is not accepted, groundwater restrictions will continue to be maintained.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #21:	**FT030 (Fire Protection Training Area)**
Projected Closure Date:	2040 (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
Site Objective:	Status Quo (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD was signed by the EPA on September 28, 2010. The selected remedy is for SVI evaluation with any future site construction. FT030 has not been included in the 2005 and 2010 Five-Year.

Site Closure Criteria: The selected remedy is for SVI evaluation with new construction. Therefore, the site objective of maintaining the status quo is required.

Proposed End Point, Metrics, and Approach:

- *Approach* - Conduct the annual LUC/IC site inspections. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* - The SVI LUC/ICs will be required for any future site construction.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/IC in the event of future construction. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #21 Mod 2 Revision: Revised Technical Approach Site FT030	**FT030 (Fire Protection Training Area [FPTA])**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil vapor sampling to confirm risk associated with SVI at the site.

Site Description
The site was formerly used as a fire training area. All components of the area have been removed along with contaminated soils. VOCs, SVOCs, and metals have been identified at the site in soil and groundwater. LTM for groundwater has ceased following the confirmation of no residual groundwater contamination at the site above NYS Groundwater Standards. Two NYSDEC Spill numbers are associated with the site (#9510184 and #9510187).

Current Conditions
The ROD was signed by the EPA on September 28, 2010. An SVI evaluation was not conducted at the site as no facilities are present at the site. Therefore, the selected remedy is for SVI evaluation with any future site construction. FT030 has not been included in the 2005 and 2010 5-Year Review. The closure of NYSDEC Spill numbers #9510184 and #9510187 associated with the site are pending regulatory concurrence. Revised per 9/12 Contract Mod to change site objective to site closure by 2015 with unrestricted reuse. Annual LUC/IC Inspections & Reporting until closure goal will continue until closure objective is met. Closure Report was originally submitted for Regulatory reviews on 6/13/13. Final Closure Report submitted on 9/4/13. A closure letter was received from NYSDEC on 3/17/14. EPA subsequently requested additional backup information which was sent to EPA on 6/20/14. Concerns related to soil vapor intrusion. No buildings exist at the site which is a taxiway. Conference call completed on 11/12/14 with EPA Risk assessment personnel, Bob Morse and Heather Bishop to review site. Path forward decided was to resubmit Site Closure Report incorporating risk assessors comments. Revised report submitted 1/21/15. Expect closure approval first quarter 2015.

Site Closure Approach
We propose to conduct an SVI evaluation and a Human Health Risk Assessment at the site. We will also support the necessary ROD Amendment/ESD to close the site. Site Evaluation Report was submitted to NYSDEC and EPA as final on September 4, 2013.

Site Closure Activities and Assumptions
- **Collection of 32 soil vapor samples.** The soil vapor samples will be collected in the SVI restriction area.
- **Conduct Human health risk assessment using sampling results.** An SVE System will be installed at the site if the Human health risk assessment finds that there are unacceptable risks for residential use at the site (Option 1).
- **Installation of SVE Well**: During the SVI evaluation stage one test SVE well will be installed. This SVE well will be reutilized if the project continues with installation of an SVE system.
- **ROD Amendment/ESD.** The ROD for the FPTA has been finalized and signed; however, a ROD Amendment/ESD will be required as a result of the proposed activities, which we will also support. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.
- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.
- **Human Health Risk Assessment**: CAPE will complete a Human Health Risk Assessment to determine if there is an unacceptable risk for residential use at the site.

Site Closure Criteria
Site closure will be recommended if no exceedences of risk-based standards (agreed upon by the Air Force and regulators) are reported and if the human health risk assessment finds that there are no unacceptable risks for residential use at the site.

Option 1 (PWS)
If the SVI evaluation and risk assessment results indicate the need for additional remediation an SVE System will be installed a the site. Given the size of the site, the system would include approximately 26 vertical SVE wells to 8 feet bgs. In addition, the system will include a vacuum pump system with heat exchanger and a vapor treatment system (piped to the exterior of the building). Based on the screen length, the required flow of the vacuum blower would be 260 cfm. The operation of the SVI mitigation system will include quarterly SVI sampling and weekly SVE system inspections and maintenance.
Given previous SVI results at the site and the results from other SVE systems at the former Griffiss AFB, it is assumed that the operation of the system will conclude in the second quarter of 2015 followed by rebound monitoring. If SVI sampling results are within the

Site #21 Mod 2 Revision: Revised Technical Approach Site FT030	**FT030 (Fire Protection Training Area [FPTA])**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil vapor sampling to confirm risk associated with SVI at the site.

acceptable range for residential use (based on Human Health Risk Assessment), site closure will be recommended. This option has not been exercised based on earlier site evaluation activities.

Potential Risks and Mitigation Strategies

The SVE system design will be based on previous site data and the 2012 SVI evaluation and risk assessment. There is a potential risk that the designed system may not adequately extract the necessary volume to eliminate soil vapor at the site within the POP. Therefore, during the start-up period of the system, we will monitor the effectiveness of the system through vapor monitoring and radius of influence testing. Addition SVE wells will be installed to increase the efficiency of the system if needed. The vacuum blower will be designed to achieve a higher flow rate if this is necessary.

Site #22:	**SS033 (Coal Storage Area – PCB Contamination)**
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD is pending. LUC/ICs include groundwater and soil restrictions and land-use restrictions for industrial/commercial/non-residential use. SS033 has not included in the in the 2005 or 2010 Five-Year Reviews.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct annual LUC/IC site inspections. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* - We will not propose closure at the site as site contamination included PCBs and the RA soil cleanup objectives were for commercial/ industrial values (1 ppm PCB for 0-1 ft bgs and 10 ppm for deeper than 1 ft). The unrestricted use soil cleanup objective for PCBs is 0.1 ppm.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/IC. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #23:	**ST036 (Building 110, Aqua System – Remove USTs, Piping and Building 110 Free Product)**
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC Inspections

Understanding of Current Site Status: The ROD is pending which recommends SVI evaluation with any future site construction. ST036 has not been included in the 2005 and 2010 Five-Year.

Site Closure Criteria: The selected remedy is for SVI evaluation with new construction. Therefore, the site objective of status quo is required.

Proposed End Point, Metrics, and Approach:

- *Approach* - Conduct the annual LUC/IC site inspections as the ROD has not been signed. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* – The remedy for the site is currently not in place.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/IC in the event of future construction. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #24:	**SS044 (EPS – PCB Site)**
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC Inspections

Understanding of Current Site Status: The ROD was signed on March 17, 2005. LUC/ICs include groundwater and soil restrictions and land-use restrictions for industrial/ commercial/non-residential/electrical substation use. SS044 has also been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to conduct annual LUC/IC site inspections. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* - We will not propose closure at the site as site contamination included PCBs, and RA soil cleanup objectives were for commercial/industrial values (1 ppm from 0-1 ft bgs and 10 ppm for greater than 1 ft bgs). The unrestricted use soil cleanup objective for PCBs is 0.1 ppm.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.

Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #25:	**SD050 (Building 214, Former Vehicle Maintenance Shop – Oil/Water Separator)**
Projected Closure Date:	2040 (Revised to Unrestricted Site Closure by December 2015 per Mod 2)
Site Objective:	Optimized Exit Strategy (Revised to Unrestricted Site Closure)
General Strategy:	Annual LUC/IC inspections, with recommended groundwater restriction deletion.

Understanding of Current Site Status: The ROD was signed on September 30, 1999. LUC/ICs include groundwater restrictions and land-use restrictions for industrial/commercial/non-residential use. SD050 has been included in the 2005 and 2010 Five-Year Reviews and the remedy was found to be protective of human health and the environment. GW Restriction Deletion request made 3/1/12. EPA approval received 5/16/12. NYSDEC approval received 4/24/12.

Site Closure Criteria: To remove the LUC/ICs, groundwater and soil COCs levels are required to be below unrestricted use soil cleanup objectives.

Proposed End Point, Metrics, and Approach:

- *Approach* - We propose to **conduct the annual LUC/IC site inspections for non-residential use** and **recommend the deletion of groundwater restrictions at the site based on the EPA approved ESD**. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The site groundwater was sampled for five sampling rounds in 2001 and 2002 and two metals (iron and sodium) were reported above NYS Groundwater SCGs. The ESD to remove the requirement to monitor groundwater at the site was signed by the EPA on September 26, 2003.
- *LUC/IC Evaluation* - We will not propose closure at the site as the associated drywell, which is the potential source of site contamination, was not located or excavated. Additionally, review of the latest soil sampling data showed dieldrin, lead, and SVOCs (benzo(a)pyrene, benzo(a) anthracene, chrysene, and dibenzo(a,h)anthracene) above unrestricted use soil cleanup objectives, but below restricted (commercial) use soil cleanup objectives. Due to the drywell not being located and COC levels, it is anticipated that the regulators will not accept site closure unless an extensive investigation is performed. This is not cost-effective or feasible due to current commercial site conditions. Therefore, the land-use restriction for non-residential use will be maintained.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #25 Mod 2 Revision: Revised Technical Approach Site SD050	**SD050 (Building 214, Former Vehicle Maintenance Shop – Oil/Water Separator)**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination in the former OWS/UST locations. Conduct excavation of residual soil contamination to residential use SCOs.

Site Description
Building 214, a former vehicle maintenance shop, is located in the west-central portion of the former Griffiss AFB. A UST, OWS, and two drywells are associated with this site. The UST reportedly overflowed due to a mechanical failure. The UST and OWS were removed in 1997. Surface water run-off in this area drains towards the Mohawk River using the base storm drainage system. The building is currently used for storage and office space for an airplane refurbishing company.

Current Conditions
The RI was conducted at the site in 1994. Results showed the presence of SVOCs, metals, and pesticides in soil and groundwater at the site. A risk assessment was also conducted for the RI. For human health, contaminants in the soil and groundwater were within the lower end of the acceptable EPA target risk range for industrial and commercial users. The ecological assessment concluded that the potential for adverse effects to terrestrial ecological receptors was considered to be insignificant.
The ROD was signed on September 30, 1999. As a result of residual soil contamination at the site following OWS removal, LUC/ICs include groundwater restrictions and land-use restrictions for industrial/ commercial/non-residential use. LTM for groundwater was conducted at the site from 2001 to 2002. Groundwater was deemed clean and monitoring ceased at the site in 2002 with regulatory approval. SD050 has been included in the 2005 and 2010 5-Year Reviews and the remedy was found to be protective of human health and the environment. Revised objective to achieve unrestricted closure by close of 2015. Groundwater restriction deletion request made 3/1/12. EPA approval received on 5/16/12 and NYSDEC approval received on 4/24/12. Annual LUC/IC Inspections & Reporting will continue until closure objective is met.. Final Closure Report submitted on 10/18/13 to NYSDEC and EPA. Received review comments very late from NYSDOH via NYSDEC on 6/9/14. RTCs sent to NYSDEC on 7/11/14. Additional soil samples collected from the 0-2 foot bgs interval as requested. All analytical results supported site closure and the revised Closure Report submitted to NYSDEC and EPA on 11/4/14. Regulatory reviews were to be completed by 12/4/14. No comments received to date. Closure approval is pending and expected by the close of the first quarter 2015.

Site Closure Approach
We propose to conduct additional soil sampling and excavation within the LUC/IC site boundary. We will also support the necessary ROD Amendment/ESD to close the site.

Site Closure Activities and Assumptions
We propose the confirmation of the presence or absence of drywells east of the former building using geophysical technology such as ground penetrating radar and conducting a soil investigation.

- **Soil Investigation – Collect soil samples from four borings within the LUC/IC site boundary (outside of Building 214).** Samples will be collected from 0–2 feet bgs, 2–4 feet bgs, and 4–8 feet bgs at each boring. Based on the results of previous investigations at the site, the samples will be analyzed for metals.
  - If soil sample results are below NYCRR Part 375 Residential use SCOs, site closure will be recommended.
- **Soil Excavation** - If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of the excavation. The samples will be analyzed for any COC identified during the soil investigation and results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigation results, the extent of the excavation is projected to be up to 150 CY. Following the excavation, full site restoration will be performed and site closure will be recommended.
- **ROD Amendment/ESD.** The ROD for Building 214 has been finalized and signed; however, a ROD Amendment/ESD will be required as a result of the proposed activities which we will also support. This will be completed when acquired data will support moving toward petition for site closure to the regulatory agencies.

Site #25 Mod 2 Revision: Revised Technical Approach Site SD050	**SD050 (Building 214, Former Vehicle Maintenance Shop – Oil/Water Separator)**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination in the former OWS/UST locations. Conduct excavation of residual soil contamination to residential use SCOs.

- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- If drywells are absent, site closure will be recommended if the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.
- If a drywell is present, site closure will be recommended if the confirmatory sampling results and the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies

The site is located within close proximity to a building and several subsurface features (utilities) which may limit excavation. As a result, additional activities, including the rerouting or manipulation of surface and subsurface features to remove contamination, may be required to achieve site closure. . The site features may include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). We will not disturb buildings. The activities will require close coordination with utility managers, landowners, and occupants. However, it is assumed that the contamination is isolated to the LUC/IC boundary and does not extend to these features.

Sites #26 through #29:	**SD052 (Apron 2, Building 775, Landfill 6, and Building 817 Chlorinated Plumes)**
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD was signed by the EPA in March 2009. LUC/ICs include soil/ groundwater intrusive work – prior approval, groundwater well installation restriction, and land-use restriction – protect remedial operations. The sites were included in the 2010 Five-Year Review. The remedy is still under evaluation.

Site Closure Criteria: The sites are under a separate contract and are in the RA stage.

Proposed End Point, Metrics, and Approach:

- *Approach* - We will conduct annual LUC/IC site inspections. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* – Maintenance of the LUC/ICs is required as the remedies for the SD052 sites are still under evaluation.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: We will recommend continued annual inspections. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 per site. With four sites, the Air Force Financial liability is $6,000 per year.

Site #30:	ST053 (Building 133 Storage Vault) Closure Achieved 2011
Projected Closure Date:	2011
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	No Further Action as recommended in the pending Record of Decision.

Understanding of Current Site Status: The Record of Decision signed in August 2011. No further action at the site. Site closure status approved.

Site Closure Criteria: Not applicable

Proposed End Point, Metrics, and Approach:

- *Approach* – No further action.
- *Rationale* - No Further Action as recommended in the pending ROD. This site is associated with the petroleum spill sites. Currently, there are no threats to human health and the environment associated with the Building 133 Storage Vault AOC. NYSDEC Spill number 9201395 was closed on March 11, 1999 and closure of NYSDEC Spill number 9702171 will be approved following the successful soil bioremediation. The SVI evaluation conducted at the Building 133 Storage Vault AOC included sub-slab, soil vapor, indoor air, and outdoor air sampling at Building 133. All are below established screening levels and are indicative of acceptable risk. No further action or evaluation of SVI is recommended at the Building 133 Storage Vault AOC.

Potential Risks and Mitigation Strategies: Dependent on public comment, the site will be No Further Action. This remedy has been approved by the NYSDEC and EPA. If the remedy is not accepted by the public, the LUC/ICs will continue to be maintained with annual inspections and reporting.

Post-POP Activity and AF Financial Liability: The site will be No Further Action.

Site #31:	SS062 (AOC 9 WSA Landfill Chlorinated Plume)
Projected Closure Date:	2040
Site Objective:	Status Quo
General Strategy:	Annual LUC/IC inspections.

Understanding of Current Site Status: The ROD was signed in 2010. LUC/ICs include soil/groundwater intrusive work – prior approval, groundwater well installation restriction, and land-use restriction – protect remedial operations. SS062 has not been included in the 2005 or 2010 Five-Year.

Site Closure Criteria: The remediation of this site is addressed under a separate contract and the remedy is still under evaluation.

Proposed End Point, Metrics, and Approach:

- *Approach* - We proposed to conduct annual LUC/IC site inspections. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA in the Base wide LUC/IC Site Inspection Report. This site will be included in the 2015 Five-Year Review.
- *Rationale* - Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment.
- *LUC/IC Evaluation* – The LUC/ICs will remain in place as the remedy for the site has not been implemented.

Potential Risks and Mitigation Strategies: The potential risk at this site is that the occupant is not in compliance with the LUC/ICs. Any noncompliance results will be reported to the Air Force and the regulators.

Post-POP Activity and AF Financial Liability: Continued annual inspections will be required at the site. As a result of the commercial and industrial use and development of GRIFFISS, annual inspections are appropriate to ensure the protectiveness of human health and the environment.
Financial Liability - The yearly estimated cost is $1,500 with all current site LUC/ICs.

Site #32:	SD041 (Bldg. 782, Nosedock #1 – Oil/Water Separator)
Projected Closure Date:	2012 (Revised to 2015)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Additional quarterly sampling to demonstrate NYSDEC groundwater compliance or close spill site and incorporate further RAs into Site SS063.

Understanding of Current Site Status: Nosedock #1 is located in the southeast portion of GRIFFISS. NYSDEC Spill number 9413416 was assigned to this site in 1995 due to potential releases from the OWS 5730 system (OWS 5730 was removed in 2001). Post excavation soil sampling was conducted following the removal of the OWS system, but no soil borings were conducted in the vicinity of or beneath the former OWS system to confirm all impacted soils were effectively removed.

Groundwater data collected in the spring of 2010 revealed evidence of VOC concentrations in all but one well; all concentrations were less than NYSDEC groundwater standards with the exception of slight MTBE (782MW-3R) and vinyl chloride (782MW-6R2) exceedences. The existence of vinyl chloride in this area is likely attributable to site SD052. Two subsequent sampling events (summer and fall 2010) have revealed no evidence of VOCs in excess of NYSDEC groundwater standards, including MTBE in well 782MW-3R, which is located north of the existing horizontal biosparging well that is part of the SS063 site.

Seven wells are sampled quarterly and 10 wells are sampled annually to provide groundwater characterization data (a total of 31 samples are collected and analyzed annually). Because no evidence of VOCs in excess of NYSDEC groundwater standards has been observed for two consecutive quarters in this area, it is unlikely that a significant source still exists in the area of the former OWS system. Draft Final Closure Report submitted 11/11/11. On 12/6/13 NYSDEC Spills Group requested additional subsurface soils data. Additional ssoil and groundwater samples collected per NYSDEC request in February 2013. Addendum to closure report has been delayed but will be submitted after follow-up meeting with NYSDEC to be held on 3/11/15. Closure Report Addendum to be submitted for Regulatory review in late March 2015. Closure approval expected in second quarter 2015.

Site Closure Criteria: VOC groundwater concentrations associated with Site SD041 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: Because two consecutive groundwater sampling events have demonstrated that all VOC concentrations are below NYSDEC groundwater standards, no further remediation is recommended pending the results from two additional quarterly groundwater sampling events. If no VOC exceedences are reported over the next two quarterly events, spill closure will be sought. If evidence of VOCs in excess of NYSDEC standards is identified during the next two quarterly events, the CAPE Team will petition the NYSDEC to close this spill site and incorporate further RAs for SD041 into the SS063 (Apron 1) site. Upon approval of Spill Site closure, the CAPE team will decommission up to 19 monitoring wells associated with this site.

Potential Risks and Mitigation Strategies: *Risk:* Results from two additional rounds of groundwater monitoring show VOC exceedences in excess of NYSDEC standards.
Mitigation Strategy: Further sampling would be conducted.

Sustainable Practices: Not applicable since no further active remediation is proposed for this site.

Site #33:	SS054 (Bldg. 781, Pumphouse 1)
Projected Closure Date:	2018
Site Objective:	Optimized Exit Strategy
General Strategy:	Optimization of existing biosparging system; focused free product recovery; prevention of further down gradient plume migration.

Understanding of Current Site Status: The Pumphouse 1 site is located in the southeast portion of GRIFFISS. Following the discovery of free product in the area in 1992, NYSDEC Spill number 9202658 was assigned to the site.

Current activities include ongoing monitoring/sampling of four monitoring wells on a quarterly basis and 18 monitoring wells on an annual basis. Groundwater analysis from July 2010 indicated that free product was still present in two wells and that benzene at concentrations in excess of its NYSDEC standard was observed in nine wells, including one of the two down gradient point-of-compliance wells. The July 2010 sampling event was the first event to show contamination in this point-of-compliance well. Increasing VOC trends were observed in several other wells during this sampling event. COCs in groundwater include benzene, toluene, ethylbenzene, and xylene (BTEX) and both 1,2,4- and 1,3,5-trimethylbenzene. Evidence of contamination in a point-of-compliance well indicates that the full extent of contaminant migration may not be defined, while the increasing contamination trend suggests that the source of contamination may not be fully defined or understood. Additional characterization is warranted to determine whether unidentified zones of residual contamination exist in the unsaturated zone or whether the contaminant source is tied strictly to the residual free product at this site.

Site Closure Criteria: Free product must be removed to the extent practical and VOC groundwater concentrations associated with Site SS054 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: Site Closure without Restrictions is the ultimate endpoint for this site; however, based on the continued existence of free product and the increasing and expanding contaminant concentration trends in light of ongoing RAs, it is our opinion that there is a strong potential for a residual source of contamination to exist at this site and closure within the 5-year POP is not likely. Although the existence of residual free product may account for the increasing dissolved phase plume trends, its occurrence at two separate locations suggests that an ongoing source(s) may still exist. Because of this, and the fact that the extent and volume of free product has not been defined in these areas, site closure within the 5-year POP cannot be guaranteed. However, we feel strongly that our approach for this site has a high probability of success with additional time. Our remedial approach has been developed to focus on the sources of contamination to groundwater so that the existing groundwater remedy, which is well suited to the site COCs, has an opportunity to be effective.

- Conduct focused supplemental soil characterization efforts at strategic locations at SS054 to better define the extent of residual source area contamination that appears to remain in this area. Of specific interest is the unsaturated zone between the base of the former excavation areas (~20 ft) and the groundwater table (~50 ft), and associated pipelines that were abandoned in place. This program will also include strategic soil sampling in the areas that have routinely contained measureable free product to help determine the potential volume and extent. The goal of this approach is to identify and eliminate residual contaminant source(s) so that groundwater RAs can effectively address the dissolved phase contaminant plume. A total of 15 sampling points will be advanced and sampled for this purpose. Additionally, one new down gradient compliance point well will be installed to define the down gradient extent of dissolved phase contamination.
- Remedial performance optimization will include enhancements to the existing biosparge system and the expansion of the existing biosparging well network to provide enhanced plume coverage and to cut off further down gradient contaminant migration. Optimization will also include the blending of nutrients (nitrogen and phosphorus) into the air stream to enhance the aerobic biodegradation process in groundwater. Nutrient blending will be conducted at volumetric levels of 0.07% nitrogen as nitrous oxide and 0.01% phosphorus as triethyl phosphate to optimize carbon, nitrogen, and phosphorous ratios (CNP). Up to nine new biosparge injection points will be added to the system to enhance the remedial program and cut-off down gradient contaminant migration. System enhancements will include a supplemental blower to support the well expansion and modifications to the existing biosparging wells to increase efficiency of oxygen/nutrient transfer to groundwater. Biosparging operations will be conducted on 12 on/12 off run time cycles, which will be implemented continually for up to 4 years.
- If residual soil source contamination is identified, the bioventing application will be reestablished in the unsaturated zone at strategic locations identified during our supplemental site characterization work to remediate residual soil contamination. The bioventing system will be designed to accommodate soil vapor extraction should that technology be a feasible alternative for source remediation. Additionally, the bioventing wells would also be designed to accommodate free product recovery, if needed. Up to six wells will be installed for this effort.

Site #33:	SS054 (Bldg. 781, Pumphouse 1)
Projected Closure Date:	2018
Site Objective:	Optimized Exit Strategy
General Strategy:	Optimization of existing biosparging system; focused free product recovery; prevention of further down gradient plume migration.

- Free-product recovery will be conducted on a well-specific basis and will be controlled by measurable thickness and recoverability, which will be determined through modeling efforts conducted after site-specific conditions are evaluated. The supplemental site characterization data will be used to help define free product volume and extent, and to support the installation of up to two additional recovery wells. Although the depth to free product is approximately 50 ft, vacuum based recovery techniques (bioslurping) using airflow entrainment through a slurp tube as the recovery mechanism will be evaluated. Free-product recovery in this manner is practical and will help draw product to the recovery point and enrich oxygen levels in the smear zone to enhance aerobic degradation. If needed, free-product recovery within a well will be supplemented through more common skimming techniques. Bioslurping will be conducted using a mobile system and will be implemented on a monthly basis for a period of 2 days per affected well.
- Continue routine groundwater monitoring and sampling to evaluate remedial performance and evaluate groundwater quality. This program will include quarterly sampling from four existing wells and annual sampling from 18 existing wells. Also, the proposed six strategic monitoring wells will be sampled and analyzed for site COCs and nutrient concentrations. Field monitoring will include dissolved oxygen (DO) and oxidation-reduction potential (ORP) measurements to confirm that aerobic conditions are being maintained, and planned DO utilization testing that will be conducted during off-cycle operations

Data and remedial performance will be reviewed on a routine basis to evaluate contaminant concentrations versus NYSDEC groundwater standards (TOGS 1.1.1). As needed, continued optimization of the remedial program will be undertaken to enhance free-product production and dissolved phase plume remediation.

Potential Risks and Mitigation Strategies: *Risk:* Site Closure without Restrictions cannot ultimately be achieved.
Mitigation Strategy: The biosparging/bioventing remedial applications conducted at this site are proven for the contaminants of concern and have been operational for several years with NYSDEC approval. Assuming a source(s) area can be identified and/or the residual free product can effectively be addressed, the likelihood of regulatory closure is good with additional time. The supplemental site characterization activities are designed to further define "risks" and develop focused mitigation strategies. Moreover, the flexibility of the proposed remediation wells will further enhance the ability to mitigate risks as they are encountered.

Post-POP Activity and AF Financial Liability: If existing free-product levels can be reduced to acceptable unrecoverable or residual levels during the POP, it is expected that post-POP activity will be focused on further reduction of dissolved groundwater contamination levels. The groundwater plume is expected to be confined to areas within the optimized bio- sparging network. Continued operation should reduce contaminant levels below NYSDEC standards. During the POP, it is also expected that the monitoring network will be continually evaluated and optimized, resulting in a reduction in annual monitoring costs. The estimated total cost to closure is $235,000.

Sustainable Practices: In situ bioremediation is an inherently sustainable remedial technology as electrical energy needs are manageable and no waste streams are generated. Expansion and optimization of the existing system is designed to maximize the existing RA without significantly impacting the energy demand. Moreover, by optimizing the system and implementing focused source area RAs, the overall remedial time frame should decrease, which will result in long-term energy savings.

Site #34:	**SS020 (Tank Farms 1 and 3) Site Closure approved 9/24/13.**
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Continue bioremediation supplementation and monitoring of the attenuating plume.

Understanding of Current Site Status: The Tank Farms 1 and 3 are located in the central portion of GRIFFISS. NYSDEC Spill number 9111733 was assigned to the site in association with the former petroleum USTs at the Tank Farm 1 area. An ROD for the Tank Farms 1 and 3 Source Removal AOC, which the selected remedy for soils at the site was no further action, was signed by the EPA in September 2009.

Currently, groundwater contamination is present in two specific areas. In December 2005, Oxygen Release Compound® (ORC) Advanced was injected into 17 borings in the source area of Tank Farms 1 and 3 between 14-20 ft bgs. ORC socks were also installed in monitoring wells located to the south of Brooks Road in October 2005. The dissolved groundwater plume appears to be well defined and no significant residual free product has been identified. Temporary biosparging was conducted in three monitoring wells at selected times in 2008 and 2009. This was performed to enhance the biodegradation of the petroleum contamination that the ORC injections had initiated.

Current monitoring activities include annual monitoring/sampling of 12 monitoring wells associated with the site. Groundwater analytical data from December 2009 indicated that VOCs are present in four monitoring wells in excess of NYSDEC standards. COCs detected at these wells are primarily isopropyl benzene, ethylbenzene and 1-, 2-, 4-trimethylbenzene. COC concentrations are generally within one order of magnitude of their respective NYSDEC standard. Optimization of existing systems and installation of additional biosparge wells completed in 2011. Optimization efforts were successful and Closure Report submitted as draft on July 30, 2013. NYSDEC approved closure request on September 24, 2013.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS020 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: The proposed metrics include monitoring groundwater contaminant concentrations until they are below NYSDEC groundwater standards in TF3-CE3 and TF3MW-21, -116, -123, -127, -128, and -133 for four consecutive quarterly sampling events. Groundwater sampling and mobile biosparging within TF3MW-123 and -127 will continue. Upon approval of Spill Site closure, the CAPE team will decommission up to 18 monitoring wells associated with this site.

Potential Risks and Mitigation Strategies: *Risk:* Dissolved VOC plume does not respond to in situ bioremediation/biosparging, or free product is observed in monitoring wells.

Mitigation Strategy: The proposed strategy includes the flexibility to easily adapt the current remedial solution. In addition to use of the existing wells, supplemental wells can be installed for additional injection of the bioremediation oxygen source. The existing biosparging program can also be increased, in terms of frequency, duration, and number of wells. Finally, if the potential risk conditions identified above continue to exist, the well network would lend itself to a more aggressive approach whereby chemical oxidant could be injected into the formation to address any residual product (unexpected) and/or dissolved phase contaminants. Continued monitoring for contaminant reduction and natural attenuation would also be considered. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Risk: Regulatory disapproval of optimized approach.

Mitigation Strategy: The proposed optimization has been selected because it has a successful track record in the industry, is implementable at this site, and has been conducted elsewhere at GRIFFISS with Regulatory acceptance. In addition, the proposed optimization strategy will enhance mitigation of contaminants at the site and result in expedited regulatory acceptance of spill closure.

Sustainable Practices: The proposed closure strategy includes the sustainable practice of in situ bioremediation. This technology eliminates the need for excavation, offsite transport, and land filling of contaminated soils; it also reduces contaminant mass, and is flexibly designed to allow for optimization. In addition, existing wells and dedicated injection and sampling equipment will be used, where possible, to eliminate new fabrications or the generation of solid wastes.

Site #35:	SS063 (Apron 1)
Projected Closure Date:	2013 (Revised to early 2014)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Optimize treatment system, hot spot remediation for soils, monitoring/sampling to demonstrate compliance.

Understanding of Current Site Status: Apron 1 is located in the southeast portion of GRIFFISS. Decommissioning of a fueling system in 1996 revealed several areas of fuel contamination, which resulted in the opening of NYSDEC spill number 9707954. Bioventing and biosparging applications have been employed at Apron 1 as RAs. A horizontal well biosparging system was installed in 2006 and began operation in 2007. The biosparging system was installed along the eastern side of Nosedock 1, southeast and down gradient of Apron 1 proper to address contamination from Apron 1 and from the SD041 area. The biosparging remedial system operated effectively from 2007-2009, when it was shut down as part of a planned evaluation program.

Current activities include vacuum enhanced groundwater extraction and periodic vertical biosparging at wells HE8MW-3 and LE2MW-1, which are the two locations where residual groundwater contamination still exists. Bioventing along the southern portion of the site to address residual soil contamination is currently shut down and being evaluated for potential rebound. Three wells are currently sampled quarterly, two semiannually and two annually to provide groundwater characterization data (a total of 18 samples are collected and analyzed annually). Recent analytical results support site closure. Draft Closure Report to be submitted to NYSDEC by 3/6/15. Anticipate site closure approval in second quarter 2015.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS063 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: The biosparge RA, in conjunction with specific source area excavation activities, appears to have been very effective in reducing groundwater contaminant concentrations. The successful application of the biosparging system suggests that there are limited ongoing impacts to groundwater from potential unidentified sources beneath Apron 1. Although unidentified sources could exist, their risk is driven by potential impacts to groundwater, which as noted, does not appear to be occurring. Groundwater system restart and optimization will be evaluated following additional groundwater monitoring and sampling to confirm the spring 2010 results. If additional groundwater remediation is required, the CAPE Team offers the following approach, which is designed to achieve spill site closure with unrestricted use:

- Focused expansion of the existing biosparging system will be implemented using strategically placed vertical wells to address residual areas of problematic groundwater. Up to six biosparge injection wells will be installed (three around well HE8MW-3 and three around well LE2MW-1). The wells will be installed to increase the effective zone of remedial influence around these two well locations. It is anticipated that the operational program in each area will include 12 on/12 off cycles for a period of one week per month at each location for two years.
- The biosparging application would further be optimization by blending of nutrients (nitrogen and phosphorus) into the air stream to enhance the aerobic biodegradation process in groundwater. Nutrient blending will be conducted at volumetric levels of 0.07% nitrogen as nitrous oxide and 0.01% phosphorus as tri-ethyl phosphate to optimize CNP.
- Continue routine groundwater monitoring and sampling to evaluate remedial performance and evaluate groundwater quality. This program will include quarterly sampling from three monitoring wells, semiannual sampling from two monitoring wells and annual sampling from two monitoring wells. All samples will be analyzed for site COCs. Nutrient concentrations will be monitoring in select wells to evaluate remedial performance. Field monitoring will include DO and ORP measurements to confirm aerobic conditions are being maintained and planned DO utilization testing that will be conducted during off-cycle operations.
- Upon approval of Spill Site closure, the CAPE team will decommission up to 11 monitoring wells associated with this site, including the horizontal biosparging well and associated remedial equipment and appurtenances.

Data and remedial performance will be reviewed on a routine basis to evaluate contaminant concentrations versus NYSDEC groundwater standards. As needed, continued optimization of the remedial program will be undertaken to enhance dissolved phase plume remediation.

Potential Risks and Mitigation Strategies: *Risk:* Dissolved VOC plume does not respond to in situ bioremediation/biosparging or free product is observed in monitoring wells.
Mitigation Strategy: The biosparging remedial application has proven to be effective for the contaminants of concern and has been operational for several years with NYSDEC approval. Assuming all source(s) that pose a direct risk to groundwater have effectively been addressed, the likelihood of regulatory closure is good within the POP. Mitigation strategies will be developed based on the supplemental characterization activities (biosparge well installations) that are proposed for the two areas of known residual contamination.

Sustainable Practices: In situ bioremediation is an inherently sustainable remedial technology as electrical energy needs are manageable and no waste streams are generated. Expansion and optimization of the existing system is designed to maximize the existing RA without significantly impacting the energy demand. Moreover, by optimizing the system and implementing focused source area RAs, the overall remedial time frame should decrease, which will result in long-term energy savings.

Site #36:	**ST037 (Building 771, Pumphouse 5 – Free Product on Groundwater – Petroleum) Closure Approved 4/23/12**
Projected Closure Date:	2011 (Revised to 2012)
Site Objective:	Closure with Unrestricted Reuse
General Strategy:	No Further Action as recommended in the pending Record of Decision.

Understanding of Current Site Status: The Record of Decision is pending which recommends no further action at the site. Draft Final Closure Report submitted 9/19/11. Closure Letter from NYSDEC Spills Group received 4/23/12.

Site Closure Criteria: Not applicable

Proposed End Point, Metrics, and Approach:

- *Approach* - No Further Action.
- *Rationale* - No Further Action is recommended in the pending ROD. This site is a petroleum source removal site and site investigations confirmed the absence of contaminants of concern. In addition, six consecutive groundwater sampling rounds confirmed the absence of contaminants of concern at Pumphouse 5 and site closure was approved by NYSDEC on October 20, 2004.

Potential Risks and Mitigation Strategies: Dependent on regulator and public comment, the site will be No Further Action. If the remedy is not accepted by the public, the LUC/ICs will continue to be maintained with annual inspections and reporting.

Post-POP Activity and AF Financial Liability: The site will be No Further Action.

Site #37:	SS064 (Apron 2)
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Expansion of existing biosparging system, focused point-source remediation, continued groundwater monitoring.

Understanding of Current Site Status: Apron 2 is located in the southeast portion of GRIFFISS. Contamination encountered during decommissioning activities resulted in the opening of NYSDEC spill number 9713631. Three source areas beneath Apron 2 have been identified – LPD Pit 1 area, Hydrant B1 area and the Hydrant B3 area. COC's in groundwater include BTEX, MTBE, 1,2,4- and 1,3,5-trimethylbenzene. Benzene concentrations in 2010 ranged from 21-582 ug/L. No free product was identified in 2010 from wells sampled.

Groundwater contamination beneath Apron 2 has been delineated to three localized areas associated with LPD Pit 1, Hydrant B1, and the Hydrant B3, all of which are located along the southern portion of Apron 2. Additional groundwater characterization wells may be needed along the upgradient side of SMC to confirm the down gradient limit of the plume in this area.

Four wells are currently sampled quarterly, two semiannually and one annually to provide groundwater characterization data (a total of 21 samples are collected and analyzed annually). Remediation activities via biosparging ongoing with good results. Closure now anticipated for 2015.Additional soil excavation will be completed at the site in spring 2015.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS064 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: Our approach for site remediation is designed to build upon the successful performance of the existing bioremediation based remedial approach. Our approach has been developed to address residual contamination through the expansion of the existing program to provide greater coverage and more focus on areas of concern. The CAPE Team offers the following approach for Apron 2, which is designed to achieve spill site closure with unrestricted use:

- Focused expansion of the existing biosparging system will be implemented by installing up to six new vertical wells within the groundwater contamination plume to address residual areas of problematic groundwater. Three additional groundwater characterization wells will also be installed during this effort to fully define the extent of groundwater contamination in the area of SMC. These wells will be designed to accommodate biosparging applications if groundwater contamination is identified to protect SMC. Biosparging operations will be conducted on 12 on/12 off run-time cycles, which will be implemented continually for 3 years
- The biosparging application would further be optimized by blending of nutrients (nitrogen and phosphorus) into the air stream to enhance the aerobic biodegradation process in groundwater. Nutrient blending will be conducted at volumetric levels of 0.07% nitrogen as nitrous oxide and 0.01% phosphorus as tri-ethyl phosphate to optimize CNP.
- Focused free-product recovery will be conducted in the area of LPD Pit 1 using vacuum enhanced free-product recovery techniques (bioslurping). This application will include the use of a mobile system equipped with a slurp tube to focus the recovery efforts on free product and minimize groundwater recovery. Recovery applications will be conducted once per month for a period of 2 consecutive days. One additional free-product recovery well will be installed to supplement the existing monitoring well at this location.
- Installation of focused (up to three) vertical biosparging wells in each of the three identified source areas (LPD Pit 1, Hydrant B1, and the Hydrant B3). Biosparging applications at these locations will be conducted using a mobile biosparging system. It is anticipated that the operational program in each area will include 12 on/12 off cycles for a period of one week per month at each location. This optimization process will also include nutrient additions as noted above.
- Continued focus operation of the existing bioventing system in the identified source areas to address residual soil contamination and contaminant vapors that may be generated as a function of the biosparging application.
- Continue routine groundwater monitoring and sampling to evaluate remedial performance and evaluate groundwater quality. This program will include quarterly sampling from four monitoring wells, semi-annual sampling from two monitoring wells and annual sampling from one monitoring well. All samples will be analyzed for site COCs. Nutrient concentrations will be monitoring in select wells to evaluate remedial performance. Three grab surface water samples will also be collected from SMC on a quarterly basis. Field monitoring will include DO and ORP measurements to confirm aerobic conditions are being maintained, and planned DO utilization testing that will be conducted during off-cycle operations.
- Upon approval of Spill Site closure, the CAPE team will decommission 21 wells associated with this site, including the horizontal biosparging well and associated biosparging and bioventing remedial equipment and appurtenances.

Site #37:	**SS064 (Apron 2)**
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Expansion of existing biosparging system, focused point-source remediation, continued groundwater monitoring.
Data and remedial performance will be reviewed on a routine basis to evaluate contaminant concentrations versus NYSDEC groundwater standards. As needed, continued optimization of the remedial program will be undertaken to enhance free-product production and dissolved phase plume remediation.	
Potential Risks and Mitigation Strategies: *Risk:* Dissolved VOC plume does not respond to in situ bioremediation/biosparging or free product is observed in monitoring wells. *Mitigation Strategy*: The biosparging remedial application has proven to be effective for the contaminants of concern and has been operational for several years with NYSDEC approval. Assuming all source(s) that pose a direct risk to groundwater are effectively addressed, and system expansion/optimization activities are effective, the likelihood of regulatory closure is good within the POP.	
Sustainable Practices: In situ bioremediation is an inherently sustainable remedial technology as electrical energy needs are manageable and no waste streams are generated. Expansion and optimization of the existing system is designed to maximize the existing RA without significantly impacting the energy demand. Moreover, by optimizing the system and implementing focused source area RAs, the overall remedial time frame should decrease, which will result in long-term energy savings.	

Site #38:	**SS065 (Building 15) Site Closure Approved 1/8/14**
Projected Closure Date:	2015 (Revised to 2014)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Continuation of vacuum enhanced groundwater extraction, with enhanced aerobic bioremediation surrounding MW-12.

Understanding of Current Site Status: Building 15 is located in the south central portion of GRIFFISS. The facility is bound by Donaldson Road to the north and Ellsworth Road to the south. The land surface at the site is topographically flat with surface drainage directed into storm drains located in the parking lot. The storm water system discharges to Rainbow Creek. NYSDEC spill number 9709366 is assigned to the site.

Building 15 was used as a service shop for fueling vehicles. The building was constructed with a system of floor drains inside the building, and two OWSs with associated skim tank systems, four aboveground storage tanks (ASTs), and two USTs outside the building. Waste oil, antifreeze, JP-8, and diesel fuel generated inside the building were released to four pump pits that discharged to the four ASTs, which were located on the east side of the building. In addition to these four ASTs, there were two 30,000-gallon USTs (15-1 and 15-2) which would receive drainage from the floor drains in the building in the event of a discharge of the fire deluge system.

One well is currently sampled quarterly and four wells are sampled annually to provide groundwater characterization data (a total of 8 samples are collected and analyzed annually). The current extent of groundwater contamination is confined to the area around B15MW-12. Beginning in July 2005, vacuum enhanced groundwater extraction has been implemented at B15MW-12 at a frequency of approximately once per month. Extracted oil/groundwater is taken to Industrial Oil in Oriskany, NY for recycling and disposal. The site is currently used for school bus storage and maintenance. Persulfate injections have been successful in remediating this site. Closure Report submitted as Final to NYSDEC on 3/31/14. Closure letter received 1/8/14.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS065 must be below NYSDEC groundwater standards in all wells for 4 rounds of sampling. Recent sampling results support a site closure request. A draft closure report is in preparation and will be submitted for AFCEC review in October 2013

Proposed End Point, Metrics, and Approach: The proposed end point for SS065/Building 15 is site closure with unrestricted reuse. The proposed metrics include evaluation of groundwater monitoring data from B15MW-12, B15MW-5, B15MW-6, B15MW-10, and B15MW-11 to assess the effectiveness the enhanced RAs at the site in support of closure of NYSDEC Spill number 9709366.

Based on available records, approximately 20,000 gallons of contaminated groundwater have been removed from B15MW-12 via vacuum enhanced groundwater recovery. Current LTM data shows VOC concentrations have stabilized with little recent decline. Therefore, optimization of the current remedial approach is proposed. Optimization of the current remedial approach is intended to accelerate the rate of VOC degradation in the B15MW-12 area.

The proposed optimization to the current remedial approach for this site includes:

- Continued use of current vacuum enhanced groundwater extraction at B15MW-12 and current groundwater monitoring program.
- Installation of up to three new borings/injection wells located around B15MW-12 and possibly within the footprint of Building 15. Samples will be obtained during installation of these new wells to assess the current extent of contamination around B15MW-12. Following installation, injection of PermeOx® Plus will be implemented at the three new wells. Groundwater monitoring will be conducted in accordance with the current quarterly/annual schedule for at least one year following the initial application of PermeOx® Plus at B15MW-12.
- Upon approval of Spill Site closure, the CAPE team will decommission up to seven monitoring wells associated with this site.

Potential Risks and Mitigation Strategies: *Risk*: Plume does not respond to vacuum enhanced groundwater extraction and/or injection of PermeOx® Plus.

Mitigation Strategy: The proposed optimization strategy includes the flexibility to adapt groundwater removal rates and/or injection volume or frequency. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Risk: Discovery of contamination beneath the Building 15 slab.

Mitigation Strategy: If contamination extends beneath Building 15, introduction of PermeOx® Plus will be applied through boreholes within the building floor.

Risk: Regulatory disapproval of optimized approach.

Site #38:	**SS065 (Building 15) Site Closure Approved 1/8/14**
Projected Closure Date:	2015 (Revised to 2014)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Continuation of vacuum enhanced groundwater extraction, with enhanced aerobic bioremediation surrounding MW-12.
Mitigation Strategy: The proposed optimization has been selected because it has a successful track record in the industry. In addition, the proposed optimization strategy will enhance mitigation of contaminants at the site and result in expedited regulatory acceptance of spill closure.	
Sustainable Practices: The proposed optimization strategy includes the sustainable practice of in-situ bioremediation. This technology eliminates the need for excavation and landfilling of contaminated soils, reduces contaminant mass, and is flexibly designed to allow for optimization. In addition, extracted oil/water removed from B15MW-12 will continue to be sent to Industrial Oil in Oriskany, NY for separation and recycling of the petroleum. To further reduce the generation of solid wastes, dedicated injection and sampling equipment will be used, where possible.	

Site #39:	**SS066 (Building 786 Jet Fuel Pipeline) Site Closure Approved 12/8/14.**
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Vacuum enhanced groundwater extraction and oxidant application

Understanding of Current Site Status: SS066, Building 786 is located in the southwest portion of GRIFFISS. Building 786 formerly housed the Aerospace Ground Equipment Shop. Liquids commonly used in this area (oil, solvents, and fuels) were collected in tanks and/or 55-gallon drums pending disposal. A 500-gallon AST used for waste oil storage was formerly located on the eastern side of Building 786. The AST was replaced by three USTs in 1990 (which have since been removed). NYSDEC Spill number 8910168 was assigned in 1990 due to the discovery of subsurface contamination attributed to the former JP-4 jet fuel pipeline located adjacent to the former AST.

Currently, two separate plume areas remain in the area. One plume is centered on the 786MW-2, -15 and -16 area. The second plume is centered on 786MW-1 and -31 (within the footprint of Building 785).

Five wells are currently sampled annually to provide groundwater characterization data at the site. Vacuum enhanced groundwater extraction has been implemented at the site since February 2004 at a frequency of approximately once per month. Extracted oil/groundwater is taken to Industrial Oil in Oriskany, NY for recycling and disposal.

In March 2012 AFCEC directed CAPE to permanently cease all remediation activities that would create aerobic subsurface conditions at the site to treat recalcitrant petroleum contamination. This direction was required as the chlorinated plume associated at the site is being remediated using and MNA/anaerobic approach. In addition the remaining petroleum compounds at the site are thought to be a carbon source for this approach. CAPE will work with NYSDEC to receive a closure status for this site with respect to chlorinated plume remediation activities. It is now planned to remove approximately 30 CYs of contaminated soil as delineated from a soil boring program to remove remaining contaminant source in the vicinity of the remaining monitoring well that still shows contaminant levels in groundwater above NYSDEC groundwater standards Site to be closed. CAPE will work with the NYSDEC Spills Group to achieve site closure considering that the remaining petroleum contaminants at the site are required as a carbon source for remediation of the chlorinated plume at the site. An excavation was completed for approximately 30 CYs of contaminated soil still located near the remaining impacted monitoring well in November 2013. Final Closure Report submitted 9/5/14. NYSDEC approved site closure on 12/8/14.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS066 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: The proposed end point for SS066 Spill number 8910168 is site closure with unrestricted reuse.

The proposed metrics include evaluation of groundwater monitoring data from 786MW-2, -15, -16, -1 and -31 to assess the effectiveness of the enhanced RAs at the site.

Vacuum enhanced groundwater extraction has been conducted at the site since 2004. Current sampling data shows that VOC concentrations are highest at 786MW-16 and declining at the perimeter wells. This trend is attributed to the vacuum enhanced groundwater extraction causing the contamination to migrate to 786MW-16 from the surrounding areas. Therefore, continued extraction is anticipated to draw additional contaminated groundwater to this well.

The following optimized remedial approach is proposed:

- Continuation of current vacuum enhanced groundwater extraction at 786MW-16.
- Installation of up to four new injection wells, three located in the 786MW-2, -15 and -16 area and one located in the 786MW-1 and -31 area. Injection of PermeOx® Plus will be implemented at the four new wells. These injections will be targeted to the shallow depths were the VOC contamination associated with SS066 are located.
- Adjust current annual sampling program to a quarterly program at wells 786MW-2, 786MW-15, 786MW-16, 786MW-1 and 786MW-31 to more efficiently track progress of remediation.
- Upon regulatory acceptance of spill closure, up to 15 monitoring wells associated with the site will be decommissioned.

Potential Risks and Mitigation Strategies: *Risk*: Plume does not respond to vacuum enhanced groundwater extraction or injection of PermeOx® Plus.

Mitigation Strategy: The proposed optimization strategy includes the flexibility to adapt groundwater removal rates and/or injection volume or frequency. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Risk: Regulatory disapproval of optimized approach.

Site #39:	**SS066 (Building 786 Jet Fuel Pipeline) Site Closure Approved 12/8/14.**
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Vacuum enhanced groundwater extraction and oxidant application
Mitigation Strategy: The proposed optimization has been selected because it has a successful track record in the industry and it is implementable. In addition, the proposed optimization strategy will enhance mitigation of contaminants at the site and result in expedited regulatory acceptance of spill closure.	
Sustainable Practices: The proposed optimization strategy includes the sustainable practice of in situ bioremediation. This technology eliminates the need for excavation and landfilling of contaminated soils, reduces contaminant mass, and is flexibly designed to allow for optimization. Extracted oil/water removed from 786MW-16 will continue to be sent to Industrial Oil in Oriskany, NY for separation and recycling of the petroleum. In addition, dedicated injection and sampling equipment will be used, where possible, to eliminate generation of solid wastes.	

Site #40:	**SS067 (Building 789)**
Projected Closure Date:	2018
Site Objective:	Optimized Exit Strategy
General Strategy:	Focused supplemental vacuum enhanced free product recovery with optimization (additional wells, dewatering, etc.); limited excavation of source soils/free product with dewatering; periodic biosparging with enhancements (additional wells and nutrient additions) will also assist in this approach to assist in reduction of residual product and reduction of dissolved phase contaminants.

Understanding of Current Site Status: The former Building 789 is located in the southeast portion of GRIFFISS. NYSDEC Spill number 9713631 is associated with the former Type II Jet Fuel (JP-4) Pipeline System located in the northern portion of the site at Apron 2. This pipeline system was decommissioned in 1996 and is currently being addressed under Site SS064, Apron 2. The contamination at the Building 789 site proper is believed to be from a section of the former Type II pipeline located northwest of the former building. This portion of the pipelines was flushed, capped with hydraulic cement, and abandoned in place. Two USTs (one 8,000-gallon containing fuel oil for boiler heating, and a 5,000-gallon replacement for it) located northeast of Building 789 were also associated with the site. The USTs were removed in 1991 and 1998, respectively. Soil screening during the second UST removal indicated increasing photo-ionization detector (PID) readings with depth to a maximum at 22-24 ft bgs, however it was later determined this was associated with the fuel pipeline system.

During the summer/fall of 2001, 52,000 cubic yards (CY) of contaminated soils (with approximately 13,000 gallons of entrained jet fuel), 25,462 gallons of free product, and 525,000 gallons of contaminated water were removed from the site. Fuel seeps were observed at multiple locations entering the excavation pit. Oil Spill Eater enzymes and ORC oxygen source were applied to the excavation prior to it being backfilled. Building 789 was also demolished.

In the summer of 2003, free-product delineation was performed with 37 wells which indicated a fairly large area of involvement. A free-product recovery pilot study was performed using 10 6-inch recovery wells and a mobile high vacuum recovery system. This was repeated once again in 2004 for a total of approximately 6,300 gallons total removed by this system.

In 2004, a LTM plan was proposed for additional sampling to monitor the dissolved phase contamination plume. Nine additional wells were installed to assist in determining the results of the free-product removal, groundwater flow direction, the eastern extent of the plume and any down-gradient migration. High levels of VOCs (benzene, m, p-xylenes, and trimethylbenzenes) were detected in numerous wells, as was free product. During the period of 2004-2006, intermittent passive skimming of free product from selected wells was performed to generate approximately 12,000 gallons of free product. In addition, the mobile high vacuum temporary system removed an additional 2,100 gallons of free product from 2005-2007.

A vacuum enhanced skimming (VES) product recovery system was constructed and installed at the end of 2006, using eight recovery wells, one monitoring well, and pump-down tests were performed. Initially the free-product recovery rates from the VES system ranged from 10-25 gallons per day. To date, approximately 65,000 gallons of free product have been recovered from the site. Additional recovery wells at the outer edges of the free-product plume may be added.

During 2006, a horizontal biosparge system was also installed at Building 789 to address residual contamination in groundwater. The well was 200 ft long and installed at a depth of 39 ft bgs, down-gradient of the free-product plume. Vapor monitoring point wells were installed as well as soil gas points for monitoring during treatment, which was begun in March 2007. The system was operated for two weeks every month. The dissolved groundwater plume is generally not detectable within 60 ft of the free-product plume but the biosparging well also acts as a barrier to down-gradient migration of free product and dissolved VOCs.

Current free-product measurements in recovery wells show thicknesses as much as 5 ft and it has been observed that free-product thicknesses increase in cycles alternating with seasonal groundwater elevation increases and decreases. Estimated free-product volumes present on site made in 2006 indicated anywhere from 32,000-206,000 gallons still remaining in the subsurface.

Site Closure Criteria: Free product must be removed to the extent practical and VOC groundwater concentrations associated with Site SS067 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: A review of the current site conditions (free-product presence in multiple wells, apparent thickness, estimated volumes, etc.) as well as the diminished recoverability from the existing remedial system, suggests that this site will not be amenable to closure within the POP. Free product is difficult to remove, over such a large area, to the extent necessary to allow closure under the NYSDEC requirements, let alone the residual dissolved phase contaminants which would remain and also require treatment. Based on the CAPE team's previous experience implementing aggressive remedial strategies, we evaluated the use of excavation and off-site disposal and in situ thermal treatment to remove the free product from the Building 789 site to attain closure within the POP. Using existing site-specific information and current estimates of the plume size and volume of free product, estimates for

Site #40:	SS067 (Building 789)
Projected Closure Date:	2018
Site Objective:	Optimized Exit Strategy
General Strategy:	Focused supplemental vacuum enhanced free product recovery with optimization (additional wells, dewatering, etc.); limited excavation of source soils/free product with dewatering; periodic biosparging with enhancements (additional wells and nutrient additions) will also assist in this approach to assist in reduction of residual product and reduction of dissolved phase contaminants.

removing free product and potentially attaining unrestricted closure within the POP ranged from $6MM to $15.5MM. It is assumed that this is cost-prohibitive to the client, given the commensurate benefits of such a closure.

Excavation with on-site treatment was also considered as a potential means of achieving site closure within the POP. However, our experience with the Biopile RA-O and Decommissioning Project indicated that the potential success for land farm remediation of petroleum-impacted soils was limited, owing to the biologically recalcitrant semi-volatile compounds and the silty nature of the soils anticipated at this site. Additionally, the space and time required to provide effective land farming applications would likely be problematic considering the aggressive redevelopment activities that are currently underway at the former base.

Additionally, the use of surfactants to aid in the recovery of the free product was considered. Surfactant-assisted free-product recovery is considered to be an innovative in situ technology. Factors limiting the use of the technology include uncertain efficacy and high cost. According to the American Petroleum Institute (API Soil and Groundwater Research Bulletin Number 18), there is potential to adversely impact migration. Because of the uncertainty, high cost, and risk presented by using surfactants and considering the fact that the dissolved plume is relatively stable at SS067, we did not consider the use of surfactants to be a viable option.

Therefore, CAPE re-assessed the treatment strategy using an assumption of achieving certain end-points within the 5 year POP that would then allow an optimized exit strategy to be employed beyond that window to ultimately obtain regulatory closure, either restricted or unrestricted.

Because of the estimated volume of free product remaining in the area, site closure within the 5-year POP cannot be guaranteed; therefore a strategy has been developed that will lead to eventual removal of the recoverable free product with subsequent reductions in dissolved plume concentrations and ultimate site closure. Our remedial approach focuses on the recoverable free product through testing and expansion of the existing recovery system and the expansion of the existing bio-sparging system to address the dissolved plume.

Free-product recovery will be conducted on a well-specific basis and will be controlled by measurable thickness and recoverability, which will be determined through modeling efforts conducted after site-specific conditions are evaluated. The supplemental site characterization data will be used to help define free-product volume and extent, and to support the installation of up to six additional recovery wells. This would be accomplished by supplementing the existing VES system with additional capabilities since its current efficiency has dropped to 2-5 gallons of free product per day, and this is anticipated to decrease further. In addition, dewatering may be used to assist in the draining of pore spaces currently filled with product and blocked with pore water, allowing the vacuum influence to be more effective. Additional hydraulic testing would be necessary to better predict dewatering needs (pump size, duration, wastewater handling, etc.). As a contingency to this effort, CAPE would consider limited excavation, while dewatering, for the specific removal of product saturated source soils with free-product removal at the same time. Metrics for this approach would continue to include free product thickness decreases as cumulative product removal recoveries were tracked. The recharge of free product into recovery wells would also be measured and quantified to provide indications of its ability to migrate and the overall risk of providing a source for dissolved phase plume development.

During these efforts, the in situ biosparge system will be expanded immediately to address more of the dissolved plume. Up to five supplemental monitoring wells will be installed between the edge of the delineated free-product plume and the existing biosparge system. These wells will be used to better determine the dissolved plume extent, as well as to design and locate the biosparge expansion. Operation of the expanded system would also enhance the aerobic biodegradation occurring at the edge of the free-product plume, thereby aiding in the ultimate reduction in dissolved phase concentrations and eventual site closure. The existing biosparge system would continue to operate. Metrics used to evaluate the system include dissolved phase concentrations, increased oxygen and carbon dioxide, and the presence/reduction of VOCs from vapor samples. Optimization will also include the blending of nutrients (nitrogen and phosphorus) into the air stream to enhance the aerobic biodegradation process in groundwater. Nutrient blending will be conducted at volumetric levels of 0.07% nitrogen as nitrous oxide and 0.01% phosphorus as triethyl phosphate to optimize CNP.

Continue routine groundwater monitoring and sampling to evaluate remedial performance and evaluate groundwater quality. This program will include quarterly sampling from four existing wells, semi-annual sampling from three existing wells and annual sampling from two existing wells in addition to quarterly.

Potential Risks and Mitigation Strategies: *Risk*: Free-product plume does not decrease in size or thickness.

Mitigation Strategy: The proposed approach not only increases the amount of recovery wells but also includes provisions for removing a competing process, the effects of hydraulic factors, on product recovery. By dewatering, an increased recovery rate should be established. If this is not sufficient, additional focused efforts of dewatering and limited excavation should also facilitate the removal of

Site #40:	**SS067 (Building 789)**
Projected Closure Date:	2018
Site Objective:	Optimized Exit Strategy
General Strategy:	Focused supplemental vacuum enhanced free product recovery with optimization (additional wells, dewatering, etc.); limited excavation of source soils/free product with dewatering; periodic biosparging with enhancements (additional wells and nutrient additions) will also assist in this approach to assist in reduction of residual product and reduction of dissolved phase contaminants.

high product laden soils.

Risk: Dissolved VOC plume does not respond to in situ biosparging or free product is observed in monitoring wells.

Mitigation Strategy: The proposed strategy includes the flexibility to easily adapt the current remedial solution. In addition to the use of the existing wells, supplemental wells can be installed for additional injection of nutrient supplements. The existing biosparging program can also be increased, in terms of frequency, duration, and number of wells. Finally, if the potential risk conditions identified above continue to exist, the well network would lend itself to a more aggressive approach whereby chemical oxidant or surfactant could be injected into the formation to address any residual product (unexpected) and/or dissolved phase contaminants. Continued monitoring for contaminant reduction and natural attenuation would also be considered. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Sustainable Practices: The proposed closure strategy includes the sustainable practice of in situ biosparging. This technology eliminates the need for excavation, offsite transport, and landfilling of contaminated soils; it also reduces contaminant mass, and is flexibly designed to allow for optimization. In addition, existing wells and dedicated injection and sampling equipment will be used, where possible, to eliminate new fabrications or the generation of solid wastes.

Post-POP Activity and AF Financial Liability: If existing free-product levels can be reduced to acceptable unrecoverable or residual levels during the POP, it is expected that post-POP activity will be focused on further reduction of dissolved groundwater contamination levels. The groundwater plume is expected to remain within the optimized biosparging network. Continued operation should reduce contaminant levels below NYSDEC standards. During the POP, it is also expected that the monitoring network will be continually evaluated and optimized, resulting in a reduction in annual monitoring costs. The estimated total cost to closure is $235,000.

Site #41:	**SS068 (Building 7001) Site Closure Approved 12/8/14.**
Projected Closure Date:	2015
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Expansion of the existing oxygen infusion (iSOC®)/biosparge system with potential use of nutrients to supplement remedial effort.

Understanding of Current Site Status: SS068, Building 7001 is located in the southwest portion of GRIFFISS, and is associated with a former vehicle fueling station. NYSDEC Spill number 9706957 was assigned to the site subsequent to the removal of three USTs (7001-3, -4, and -5), associated piping and a canopied concrete parking area with fuel dispensers on concrete islands. UST 7001-3, a 1,000-gallon steel tank that contained gasoline, was installed in 1987 to replace UST 7000-1. UST 7001-4 was a 2,000-gallon steel tank that contained JP-4 and was installed to replace UST 7001-2. UST 7001-5 was a 5,000-gallon steel tank that contained diesel fuel.

Based on the evaluation of existing data, petroleum contamination is currently defined to center around monitoring wells 7001MW-1 and 7001MW-2. The current remedial strategy includes groundwater remediation using continuous iSOC® at 7001MW-1 and 7001MW-2 (since 2007) and periodic vertical biosparging at 7001MW-2 (since 2008).

Eight wells are currently sampled quarterly, and one well is sampled annually, to provide groundwater characterization data (a total of nine samples are collected and analyzed annually). Site to be closed. Closure Report submitted for NYSDEC review on 8/21/14. Closure approval from NYSDEC received on 12/8/14.

Site Closure Criteria: VOC groundwater concentrations associated with Site SS068 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: The proposed end point for SS068/Building 7001 Spill number 9706957 is site closure with unrestricted reuse.

Previous monitoring data indicate that VOC concentrations have declined as a result of oxygen infusion and periodic vertical biosparging activities. Continuing the current program of remedial technologies plus additional oxidant application is anticipated to enhance the biodegradation of VOC contamination and expedite the remediation processes at the site.

The following optimized remedial approach is proposed for this site:

- Continuation of current oxygen infusion, vertical biosparging, and current groundwater monitoring.
- Continuation of continuous iSOC® at monitoring wells 7001MW-1 and 7001MW-2 and periodic vertical biosparging at 7001MW-2.
- Addition of up to four new injection wells within the plume area for application of oxygen.
- Periodic vertical biosparging will be conducted using FPM's mobile biosparging trailer for three consecutive days every two weeks at well 7001MW-2.
- Upon regulatory acceptance of spill closure, up to five monitoring wells will be decommissioned.

Potential Risks and Mitigation Strategies: *Risk*: Plume does not respond to optimized remediation strategy.

Mitigation Strategy: The proposed optimization strategy includes the flexibility to adapt oxygen infusion via iSOC® technology. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Risk: Regulatory disapproval of optimized approach.

Mitigation Strategy: The proposed optimization has been selected because it has a successful track record in the industry, is implementable, and has been conducted at the site with regulatory acceptance. Oxygen infusion and periodic vertical biosparging have been conducted since 2007 and 2008, respectively, and oxidant application was performed at this site in 2005 with regulatory concurrence. In addition, the proposed optimization strategy will enhance mitigation of contaminants at the site and result in expedited regulatory acceptance of spill closure.

Sustainable Practices: The proposed optimization strategy includes the sustainable practice of in situ bioremediation. This technology eliminates the need for excavation and landfilling of contaminated soils, reduces contaminant mass, and is flexibly designed to allow for optimization. In addition, dedicated injection and sampling equipment will be used, where possible, to eliminate generation of solid wastes.

Site #42:	**SS069 (Bulk Fuel Storage Area) Site Closure Approved 5/1/13.**
Projected Closure Date:	2014 (Revised to 2013.)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Continue to run biosparge systems for up to 2 years; apply oxidant and use vacuum enhanced groundwater extraction at isolated wells in year one to optimize current approach, perform limited excavation in area with free product.

Understanding of Current Site Status: The Bulk Fuel Storage Area (BFSA) is located at the extreme southern part of GRIFFISS. Currently, three NYSDEC spill numbers are open at the BFSA in association with petroleum contamination: 9507364 (closure pending), 9810949, and 0009824.

The BFSA was constructed in 1959 and consisted of three 630,000-gallon steel ASTs (653, 655, and 657), each surrounded by a secondary containment dike. The site also contained UST 654-1 and -2, a pump house (Building 654), two OWSs in Building 654, and UST/OWS 6378. UST 654-1 and UST/OWS 6378 were removed in 1998 and 1999; ASTs 653, 655, and 657 and UST 654-2 were removed in 2004.

One horizontal well (BFSAHW-1) was installed at the site in 2005 to perform a biosparging pilot study. Based on the pilot study results, two additional horizontal wells (BFSAHW-2 and BFSAHW-3) were installed in 2007 to optimize site coverage. BFSAHW-2 was shut down in January 2010 to evaluate contamination rebound. Sampling data from monitoring wells and VMPs associated with BFSAHW-2 showed no rebound during the spring, summer, and fall 2010 sampling rounds. In addition to horizontal biosparging, mobile vacuum enhanced groundwater extraction has been performed at BFSAMW-5 since 2008 to remove free product. Petroleum contamination is isolated to monitoring wells BFSARWT-3 and BFSMW-5 (free product observed in 2010).

Closure of NYSDEC Spill number 9507364 was recommended in February 2009 (FPM, February 2009) due to the absence of VOC detections at monitoring well MWBCF-3 during consecutive sampling events.

Twelve wells are currently sampled quarterly, 13 semi-annually, and seven annually to provide groundwater characterization data (a total of 45 samples are collected and analyzed annually).
Draft Final Closure Report was submitted for NYSDEC review on 6/8/12. Additional subsurface soil data requested on 12/6/12 by NYSDEC. Five additional locations were sampled in February-March 2013 and results submitted as an addendum to the Closure Report. NYSDEC approved closure of this site on May 1, 2013.

Site Closure Criteria: Free product must be removed to the extent practical and VOC groundwater concentrations associated with Site SS069 must be below NYSDEC groundwater standards in all wells for four rounds of sampling.

Proposed End Point, Metrics, and Approach: The proposed end point for SS069/BFSA spill numbers 9507364, 9810949, and 0009824 is site closure with unrestricted reuse.

Current groundwater sampling data indicates that biosparging performed in horizontal wells BFSAHW-1, -2, and -3 is successfully reducing contaminant levels at the BFSA. Therefore, continued biosparging is recommended for this area.

The following optimized remedial approach is proposed for the BFSA:

- Continuation of current biosparging routine at BFSAHW-1 and BFSAHW-3.
- Optimize remedial approach at BFSAHW-1 during 2011/2012. Groundwater contamination at BFSAHW-1 is isolated to BFSARWT-3. Vacuum enhanced groundwater extraction combined with oxidant application will be used to address residual groundwater contamination at BFSARWT-3. Vacuum extraction of groundwater will be performed monthly with oxidant application performed quarterly for one year.
- Perform a rebound evaluation at BFSAHW-1 beginning in summer 2012. After four quarterly rounds of VOC concentrations below NYS Groundwater Standards/ no rebound, BFSAHW-1 will be shut down.
- Based on the current rebound evaluation, shutdown of BFSAHW-2 may be recommended before this POP begins. The previous three evaluation rounds show no rebound. If the winter 2010/2011 sampling results show that no rebound is present, permanent shut down will be recommended.
- Groundwater contamination at BFSAHW-3 is isolated at BFSMW-5, where a sheen (0.03 ft) of free product was recently observed. Depth to groundwater at BFSMW-5 is approximately 5 ft bgs; therefore, in order to expedite site closure, a limited excavation will be performed to remove the product. Up to 200 CY of soil will be removed from the area around BFSMW-5. The surficial soils, down to 3 ft bgs, will be segregated as clean and used for backfill. The deeper soils (soils within 2 ft of the groundwater surface) will be disposed offsite. Groundwater and product will be removed from the excavation using vacuum extraction until no observable free product remains.
- Perform a rebound evaluation at BFSAHW-3 beginning summer 2012.

Site #42:	**SS069 (Bulk Fuel Storage Area) Site Closure Approved 5/1/13.**
Projected Closure Date:	2014 (Revised to 2013.)
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Continue to run biosparge systems for up to 2 years; apply oxidant and use vacuum enhanced groundwater extraction at isolated wells in year one to optimize current approach, perform limited excavation in area with free product.

- Decommissioning of up to 45 existing monitoring will be conducted following spill closure. In addition, the three horizontal wells including the combined 1,000 ft of screen and 740 ft of solid riser will be decommissioned and removed from the site. All biosparging aboveground piping and the biosparging compressor trailer will also be removed from the site.

Potential Risks and Mitigation Strategies: *Risk*: Plume does not respond to continued biosparging or oxidant application.

Mitigation Strategy: The proposed optimization strategy includes the flexibility to adapt biosparging duration and/or application of oxidant mass/frequency. This flexibility allows for real-time adjustment of the strategy to address trends in the data.

Risk: Rebound occurs during shutdown performance monitoring period.

Mitigation Strategy: The biosparging systems will be maintained during the shutdown monitoring period. As such, the system will be available to be turned back on to address rebound if it occurs. In addition, the use of oxidant application can be applied to address specific rebound areas.

Risk: Regulatory disapproval of optimized approach.

Mitigation Strategy: The proposed optimization has been selected because it has a successful track record in the industry, is implementable, and has been conducted at the BFSA or elsewhere at GRIFFISS with regulatory acceptance. Groundwater monitoring has been performed at the site since 2003 and horizontal biosparging has been conducted at the site since 2005 with regulatory acceptance. In addition, the proposed optimization strategy will enhance mitigation of contaminants at the site and result in expedited regulatory acceptance of spill closure.

Sustainable Practices: The proposed optimization strategy includes the sustainable practice of in situ bioremediation technologies biosparging and oxidation. These technologies eliminate the need for excavation and landfilling of contaminated soils, reduce contaminant mass, and are flexibly designed to allow for optimization. In addition, dedicated injection and sampling equipment will be used, where possible, to eliminate the generation of solid wastes.

Site #43:	**SS070 (Building 150 NYSDEC Spill #0800273) Site Closure Approved 2/11/13.**
Projected Closure Date:	2011 (Revised to 2013).
Site Objective:	Site Closure with Unrestricted Reuse
General Strategy:	Pursue NYSDEC acceptance of spill closure.

Understanding of Current Site Status: The former Building 150 was located in the central portion of GRIFFISS. Results from a 2008 geotechnical/surface investigation showed the petroleum impacted soil and groundwater. As a result the site was issued NYSDEC Petroleum Spill number 0800273. Draft Final Closure Report submitted for NYSDEC REVIEW ON 5/15/12. Additional subsurface soil data requested by NYSDEC ON 12/6/12. Additional data acquired in December 2012 and results submitted in revised Final Closure Report on 1/10/13. Spill Closure Letter received from NYSDCE Spills Group on 2/11/13.

Removal Action

- A source removal including soil excavation and groundwater removal was performed in 2009.
- Confirmatory soil samples showed that all contaminated soils were removed.
- Following excavation, 50,000 gallons of groundwater was extracted from the open pit.

Groundwater and Soil Investigations

- Additional soil and groundwater investigations confirmed the absence of contamination in the foot print of the excavation except for one minimal VOC exceedence in the groundwater sample.
- The investigation also showed groundwater and saturated soil contamination at the southeast corner of the site. Only one VOC and three SVOCs were found to be at concentrations slightly above the New York State SCGs.

Oxidant Application

- An oxidant was applied to the open-pit excavation and injected into seven locations cross gradient of the excavation.

Site Restoration

- The excavation was backfilled and the site was restored with NYSDEC concurrence.

Groundwater Monitoring

- Four monitoring wells were installed and sampled in March 2010. Analytical results did not show any site-related VOCs within the groundwater samples.
- Three minor SVOC exceedences of the NYS Groundwater SCGs were reported at monitoring well 150MW-2 for benzo(a)anthracene, benzo(b) fluoranthene, and chrysene. These three SVOC exceedences were one order of magnitude below the reporting limit.
- The other three groundwater wells indicated only one detected compound in each sample, and these detections were well below NYS Groundwater SCGs.

Site Closure Criteria: Confirmed absence of petroleum contamination at the site.

Proposed End Point, Metrics, and Approach:

- *Approach* - **Close site with unrestricted use after four quarters of groundwater sampling**. Groundwater will be collected at the three down gradient and analyzed for VOCs and SVOCs. LUC/ICs will be maintained until spill closure.
- *Rationale* - Extensive site investigations and a removal action were conducted at the site. Results from the soil and groundwater sampling at the site confirmed that the contamination has been removed. Groundwater sampling data showed three minor SVOC exceedences. The four additional quarters of sampling will provide the regulators with additional data to support spill closure. The LUC/ICs will be maintained with annual inspections until the spill is closed to reduce the potential exposure associated with residual petroleum contamination.

Potential Risks and Mitigation Strategies: Potential risks include groundwater data showing VOC and SVOC exceedences. This risk is low, however additional groundwater monitoring will be conducted at the down gradient monitoring wells for VOCs and SVOCs until sampling data supports spill closure.

Post-POP Activity and AF Financial Liability: It is anticipated that no post-POP activities will be performed at the site.

Site #44 Mod 2 Revision: Revised Technical Approach Site AOI72	**AOI72**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination at locations where contamination was previously identified. Conduct excavation of residual soil contamination to residential use SCOs.

Site Description
Former LUC/IC Site AOI72 is also referred to as the Mobile Ave–Former Drum Storage Area in Parcel F9. The AOI is located in the southern portion of the former Griffiss AFB. This property has been transferred.

Current Conditions
AOI 72 did not require a ROD as the site was closed during the Preliminary Assessment (PA) / Supplemental Investigation (SI) period. The LUC/IC for this site was set in place during property transfer as a deed restriction. The LUC/IC for this site, as stated in the Deed for Parcel F9, is:

"The Grantee covenants and agrees to the requirement for additional evaluation of a portion of the property within AOI 72 should the property use change from institutional/educational to residential."

A PA/SI was conducted at the site in 1999. Soil samples were collected from the 0–2-foot bgs interval and the 2–4-foot interval and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. Through comparison with NYCRR Part 375 Residential use SCOs:

- One pesticide (4,4'-D,D,T) was detected in a surface sample (0–2 feet bgs) at one location (G071-NS01) with a concentration of 2.02 parts per million (ppm). The NYCRR Part 375 Residential use SCO is 1.7 ppm.
- Lead was detected in a surface sample at one location (G071-NS07) with a concentration of 546 ppm. The NYCRR Part 375 Residential use SCO is 400 ppm.
- Copper was detected in surface samples from five locations (G071-NS10, -NS11, -NS12, -NS13, and -NS14). The concentrations ranged from 304 J to 960 J ppm. The NYCRR Part 375 Residential use SCO is 270 ppm. In addition, the J data qualifier indicates the concentrations are estimates. The base wide background concentration for copper is 43.8 ppm.
- SVOCs were detected in surface sampling at two locations (G071-NS12 and –NS15). One location was located next to the asphalt parking lot (G071-NS12) and one in the grass in the southern portion of the site (G071-NS15).
- SVOCs in exceedence at G071-NS15 include; benzo(a)anthracene (2.04 ppm), benzo(a)pyrene (1.7 ppm), benzo(b)flouranthene (2.01 ppm), benzo(k)flouranthene (2.5 ppm), and chrysene (2 ppm). The NYCRR Part 375 Residential use SCOs for these compounds is 1 ppm.
- SVOCs in exceedence at G071-NS12 include; benzo(a)anthracene (48.4 ppm), benzo(a)pyrene (39.8 ppm), benzo(b)flouranthene (49 ppm), benzo(k)flouranthene (47 ppm), chrysene (45 ppm), dibenzo(a,h)anthracene (6.5 J ppm), and indeno(1,2,3-cd)pyrene (8.4 J ppm). The NYCRR Part 375 Residential use SCOs for these compounds is 1 ppm, except for dibenzo(a,h)anthracene (0.33 ppm), and indeno(1,2,3-cd)pyrene (0.5 ppm).

Draft Closure report submitted to NYSDEC and EPA on 9/11/14. Review comments were due 10/26/14. Final Site Closure Report submitted for NYSDEC and EPA review on 11/5/14. Regulatory review comment period expired on 12/5/14. All expressed concerns by NYSDEC and EPA had been addressed and there were no remaining site issues. Additional comments however were received on 1/9/15 from NYSDOH via NYSDEC after final 30-day review period had lapsed. Responses to comments sent 1/20/15. Per 1/21/15 meeting NYSDEC was to communicate our responses to comments to NYSDOH. FPM provided via email on 1/21/15 the ROD for this site. Closure is pending but expected by close of first quarter 2015.

Site Closure Activities and Assumptions
We propose to conduct a surface and soil investigation at the site.

- **Soil Investigation** – Install 28 soil sample borings to approximately 4 feet bgs in seven areas. Borings will be positioned based on the results of the 1999 site investigation, at the boring locations listed above. Samples will be collected from 0–2 feet bgs and 2–4 feet bgs. Based on the results of previous investigations at the site, the samples will be analyzed for SVOCs, pesticides, and metals.
  - If soil sample results are below NYCRR Part 375 Residential use SCOs, site closure will be recommended.

Site #44 Mod 2 Revision: Revised Technical Approach Site AOI72	**AOI72**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct soil sampling to confirm the nature and type of residual contamination at locations where contamination was previously identified. Conduct excavation of residual soil contamination to residential use SCOs.

- **Soil Excavation** - If soil sample results are above NYCRR Part 375 Residential use SCOs, localized excavation will be conducted followed by confirmatory soil sampling. The confirmatory sampling will consist of five composite samples from the four walls and bottom of each excavation. The samples will be analyzed for any COCs identified during the soil investigation and results will be compared to NYCRR Part 375 Residential use SCOs. Additional excavation will be proposed until soil concentrations are below NYCRR Part 375 Residential use SCOs. Based on previous investigation results, the extent of the seven excavations are projected to total up to 200 CY at the site. Following the excavation, full site restoration will be performed and site closure will be recommended.
- **LUC/IC Inspections**. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Site Closure Criteria

- Site closure will be recommended if the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.
- Site closure will be recommended if the confirmatory sampling results and the results from the soil investigation show COC concentrations below NYCRR Part 375 Residential use SCOs.

Potential Risks and Mitigation Strategies:

The site is located within the same property as a high school and is used as a parking lot, which may limit excavation. As a result, additional activities, including the rerouting or manipulation of surface and subsurface features to remove contamination, may be required to achieve site closure. The site features may include roadways, parking lots, and utilities (gas piping, steam piping, or electrical lines). We will not disturb buildings. The activities will require close coordination with utility managers, landowners and occupants.

Site #45 Mod 2 Revision: Revised Technical Approach for Site DW211-01	**Building 211 Drywell Closure Pending.**
Closure Date	2015
Revised Site Objective	**Site Closure**
Strategy	Conduct concrete sampling to support site closure.

Site Description
Former LUC/IC site Building 211 is owned by the City of Rome and is used as a water supply building in the Tin City area. The building is located in Parcel F3A and has been transferred. The site is associated with one drywell. Site OTH-211 (DW-211) was a mercury spill from a broken manifold gauge in Building 211 in 1991. The site was remediated in 2000. A project to encapsulate the residual contamination by painting the floor was completed in July 2002.

Current Conditions
A ROD was not required because it was part of the AOI group and was closed during the PA/SI investigation period. LUC/ICs at the site were implemented through deed restrictions. The deed restriction provided in the Parcel F3A deed, includes:

> *"The grantee is notified in Exhibit E (deed) that an encapsulation project was completed in the Building 211 pipe vault. The Grantee covenants to be responsible for maintaining the integrity of the encapsulation and for complying with all applicable Federal, State, and Local laws relating to the disposal of demolition debris if Building 211 is demolished or modified."*

Site Closure Approach
We propose to conduct concrete sampling within the slab. Due to the location of the main water pipeline, a concrete coring machine will be used to collect the samples. Following sampling, we will repair the cores with concrete and then paint (re-encapsulate) the affected areas in the slab.

Site Closure Activities and Assumptions
- Conduct concrete sampling at six locations within the slab. The concrete samples will be analyzed for mercury. To minimize any adverse impacts to the main water pipeline, a concrete coring machine will be used to collect the samples.
- LUC/IC Inspections. CAPE will continue with LUC/IC Inspections and annual reporting until unrestricted site closure is achieved or until the end of the POP whichever comes first.

Closure Report submitted for Regulatory reviews on 10/18/13. NYSDEC requested additional sediment sampling from subsurface vault well after review periods had lapsed. Additional data collected in June 2014. Samples analyzed for Hg. An addendum to the Closure Report completed and submitted for NYSDEC and EPA review on 9/26/14. Expected closure approvals and letters from NYSDEC and EPA by close of 2014. All expressed concerns from NYSDEC had been addressed and there are no remaining site issues. Should be a straight forward closure. Revised final site closure report addendum report submitted to NYSDEC and EPA on 11/14/14. Comments via email received on 1/9/15 indicated no additional comments on this report. A formal closure letter from NYSDCE will be needed and at t an email concurrence from EPA. During 1/21/15 meeting NYSDEC indicated that a formal closure approval letter would be sent. EPA would provide email concurrence.

Site Closure Criteria
If mercury is absent, site closure will be recommended.

Potential Risks and Mitigation Strategies:
The building has been demolished and the building slab is still in place. This location is the entry point of the main water pipeline into the former base from the City of Rome and houses vaults associated with the water pipeline. The Local Redevelopment Authority (LRA) and City of Rome have requested that the slab not be removed due to the possibility of damage to the water pipeline below. Therefore, if mercury is present, the concrete will be re-sealed, and the site will remain open. If residual contamination is present at the site, the LUC/ICs will be maintained. All inspection results, including current site conditions and LUC/IC implementation confirmations, will be submitted annually to the Air Force, NYSDEC, and EPA. Annual LUC/IC confirmation is required to evaluate the implementation and performance of an LUC/IC or deed restriction in order to determine if it is protective of human health and the environment. The LUC/IC results will be reported annually in the Base wide LUC/IC Site Inspection Report.

Site: Unknown 1-10 Sites 46 and 47	**Unknown Sites** (Ten sites were considered in AFCEC SOW. 2 sites identified to date) AOI-474 and Building 785 Pipeline
Projected Closure Date:	2015
Site Objective:	Investigate unanticipated contamination sites
General Strategy:	Groundwater and soil sampling

Understanding of Current Site Status: The Air Force has set aside the potential for 10 additional sites to be investigated upon the identification of previously unidentified and undocumented releases.

Unknown Site #1 (AOI 474): Unknown Site 1 addressed a debris pile located near Landfill 2. Draft Site Closure Report for AOI 474 submitted for NYSDEC and EPA review on 2/10/14. Completed site restoration activities in May 2014. Final Closure Report was submitted in June 2014. Received email with comments from NYSDOH via NYSDEC on 5/8/14 regarding concerns about metals in groundwater. Site is believed to be confused with adjacent landfill site and COCs. RTCs submitted to NYSDEC on 7/11/14. Revised Final Closure Report submitted on 7/17/14. Final review comments were due 8/18/14. NYSDOH requested via NYSDEC that GW samples needed to be collected at a groundwater seep mentioned in the report. Samples were collected in November 2014A second revision of the Final Site Closure Report was submitted for Regulatory review on 1/16/15. GW sampling results supported closure. Expect site closure approval in first quarter 2015.

Unknown Site #2- Building 785 Pipeline: During remediation activities at SS066 Building 786 it was discovered that a new spill area was associated with the pipeline that was located in the vicinity of Building 785. An investigation was authorized by AFCEC and results indicate that this site would need to be reported as a new spill site. The work plan for this investigation was approved by AFCEC on September 9, 2014 and the Work Plan submitted for NYSDEC review. No comments were or will be received. The site investigation was completed and the Site Investigation and Remedial Action Plan was submitted for AFCEC review on December 12, 2014. Review comments were received from AFCEC and the report is presently under revision and scheduled for submittal to NYSDEC by late February 2015.

Site Closure Criteria: Confirmation of soil and groundwater COCs below soil clean-up objectives and NYS Groundwater SCGs.

Proposed End Point, Metrics, and Approach:

- *Approach* – On an as needed basis, we will conduct soil and groundwater investigations at any previously unidentified and undocumented release site. It is proposed for any release site, four surface soil samples, eight subsurface soil samples and four groundwater samples will be collected and analyzed for the site specific COCs.
- *Rationale* – Investigations using these samples will determine any soil or groundwater contamination previously unidentified and undocumented.

Potential Risks and Mitigation Strategies: Potential risks for these investigations include the failure to identify all site contamination. The sample methodology will be executed in a manner to maximize site coverage with the 12 soil samples and four groundwater samples proposed.

Post-POP Activity and AF Financial Liability: Based on the investigation results, we will recommend future site remediation and/or monitoring to ensure the protectiveness of human health and the environment.

Financial Liability – Not applicable.

APPENDIX C

PERFORMANCE AND PAYMENT MILESTONES

FORMER GRIFFISS AFB

Site Identifier (from Enclosure 1 of the PWS)	Proposed Site Objective (Contractor to select one from Section 1.5 of the PWS)	CLIN	Performance Milestone (Specified by the Contractor)	Performance Metric (Specified by the Contractor to support payment)	Payment Schedule Year 1 (CY2011) Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Total	Payment Schedule Year 2 (CY2012) Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Total	Payment Schedule Year 3 (CY2013) Jan-Mar 2013	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Total	Payment Schedule Year 4 (CY2014) Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Oct-Dec 2014	Total	Payment Schedule Year 5 (CY2015) Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total	Contract Total	Retainage Pending Goal Achievement
Project Management Documents	Project Management Plan (Including Annual Updates)	005	Project Management Plan and Updates	Acceptance of Final PMP by AFCEC	$ 78,147.00	$0	$0	$0	$ 78,147.00	$0	$0	$0	$0	$ -	$9,274	$ -	$0	$0	$ 9,274.00	$ -	$4,637	$0	$0	$ 4,637.00	$ 4,637.00	$0	$0	$0	$ 4,637.00	$ 96,695.00	
	PMP Update Mod 002	005	PMP MOD 002 Revision	AFCEC	$0	$0	$0	$0	$ -	$0	$0	$0	$0	$ -	$ -		$8,442		$ 8,442.00	$0	$0	$0	$0	$ -	$0	$0	$0	$0	$ -	$ 8,442	
	UFP-QAP (Including Annual Updates)	005	Sitewide UFP-QAPP	Acceptance of Final UFP QAPP and Final Health and Safety Plan Updates by AFCEC, USEPA and NYSDEC	$ 84,709.00	$0	$0	$0	$ 84,709.00	$0	$5,468	$0	$0	$ 5,468.00	$0	$ 5,468.50	$0	$0	$ 5,468.50	$ -	$5,468.50	$0	$0	$ 5,468.50	$ 5,467.50	$0	$0	$0	$ 5,467.50	$ 106,581.50	
	HSP (Including Annual Updates)	005	Site Wide HSP	Acceptance of Final HSP by AFCEC	$ 84,709.00	$0	$0	$0	$ 84,709.00	$0	$5,468	$0	$0	$ 5,468.00	$0	$ 5,468.50	$0	$0	$ 5,468.50	$ -	$5,468.50	$0	$0	$ 5,468.50	$ 5,467.50	$0	$0	$0	$ 5,467.50	$ 106,581.50	
	ERPIMS Uploads	005	ERPIMS Uploads	Email documentation from AFCEC indicating successful upload	$0	$0	$0	$0	$ -	$0	$0	$8,375	$0	$ 8,375.00	$0	$8,375	$0	$0	$ 8,375.00	$0	$0	$8,375		$ 8,375.00	$0	$0	$0	$8,375	$ 8,375.00	$ 33,500.00	
	AFCEC Website Uploads	005	AFCEC Website Uploads of Final Document Submittals	Email documentation from AFCEC indicating successful upload	$0	$0	$0	$0	$ -	$0	$0	$8,375	$0	$ 8,375.00	$ -		$8,375		$ 8,375.00	$0	$0	$8,375		$ 8,375.00	$0	$0	$0	$8,375	$ 8,375.00	$ 33,500.00	
			PROJECT MANAGEMENT SUBTOTAL						$ 247,565.00					$ 27,686.00					$ 45,403.00					$ 32,324.00					$ 32,322.00	$ 385,300.00	$ -
5-Year Review Report	5-YEAR Review Report to address sites LF001,LF002,LF003,LF007,LF009,SD031,SD032,SD052,ST006,SS008,DP011,DP012,DP013,DP015,SS017,DP022,SS023,SS024,SS025,FT030,SS033,ST036,SS044,SD050,SD052-1,SD052-2, SD052-4, DS052-5 and SS062	005	Five Year Review Document	Acceptance of Final Five Year Review Document by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$78,394	$0	$19,599	$ 97,993.00	$ 97,993.00	
			5-YEAR REVIEW SUBTOTAL						$0					$0					$0					$0					$ 97,993.00	$ 97,993.00	$ 19,599
Annual LUC/IC Inspection Report	Annual LUC/IC Report CERCLA Sites. LF001,LF002,LF003,LF007,LF009,SD052,ST006,SS008,DP011,DP012,DP013,DP015,SS017,DP022,SS023,SS024,SS025,FT030,SS033,ST036,SS044,SD050,SD052-1,SD052-2, SD052-4, DS052-5 and SS062	005	Annual LUC-IC Inspection	Acceptance of LUIC Inspection Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$72,748	$ 72,748.00	$0	$0	$0	$ 68,066.00	$ 68,066.00	$ -	$0	$0	$77,789	$ 77,789.00	$0	$0	$0	$63,205	$ 63,205.00	$0	$0	$25,753	$76,890	$ 102,643.00	$ 384,451.00	
			ANNUAL LUC-IC INSPECTION REPORT SUBTOTAL						$ 72,748.00					$ 68,066.00					$ 77,789.00					$ 63,205.00					$ 102,643.00	$ 384,451.00	$ 76,890
LF001/Landfill 1	Optimized Exit Strategy	0005	Annual Landfill Inspection and Repairs	Letter report to AFCEC documenting inspection dates and repairs made. Copies to EPA and NYSDEC but approvals not warranted.	$0	$6,320	$0	$0	$6,320	$0	$6,320	$0	$0	$6,320	$0	$6,320	$0	$0	$6,320	$0	$6,320	$0	$0	$6,320	$0	$6,320	$0	$0	$6,320	$ 31,599.56	
		0005	Final Groundwater Monitoring and Reporting	Acceptance of Final, Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$41,322	$41,322	$0	$0	$0	$40,322	$40,322	$0	$0	$0	$41,322	$41,322	$0	$0	$0	$42,322	$42,322	$0	$0	$0	$0	$0	$ 165,287.52	
		0005	Optimized Exit Strategy	AFCEC Approval of Optimized Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,299	$55,797	$82,096	$ 82,096.00	
			SITE SUBTOTAL						$47,641					$46,642					$47,642					$48,642					$88,416	$278,983	$ 55,797
LF002/Landfills 2&3	Optimized Exit Strategy	0005	Annual Inspection and Repairs	Letter report to AFCEC documenting inspection dates and repairs made. Copies to EPA and NYSDEC but approvals not warranted.	$0	$3,646	$0	$0	$3,646	$0	$3,646	$0	$0	$3,646	$0	$3,646	$0	$0	$3,646	$0	$3,646	$0	$0	$3,646	$0	$3,646	$0	$0	$3,646	$18,230	
		0005	Final Groundwater Monitoring and Reporting	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$27,953	$27,953	$0	$0	$0	$26,953	$26,953	$0	$0	$0	$0	$0	$0	$0	$0	$26,953	$26,953	$0	$0	$0	$0	$0	$81,859	
		0005	Optimized Exit Strategy	AFCEC Approval of Optimized Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,044	$27,283	$36,327	$36,327	
									$0					$0					$0					$0							
			SITE SUBTOTAL						$31,599					$30,599					$3,646					$30,599					$39,973	$136,416	$ 27,283
LF003/Landfill 7	Optimized Exit Strategy	0005	Annual Inspection and Repairs	Letter report to AFCEC documenting inspection dates and repairs made. Copies to EPA and NYSDEC but approvals not warranted.	$0	$5,469	$0	$0	$5,469	$0	$5,469	$0	$0	$5,469	$0	$5,469	$0	$0	$5,469	$0	$5,469	$0	$0	$5,469	$0	$5,469	$0	$0	$5,469	$27,345	
		0005	Final Groundwater Monitoring and Reporting	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$32,814	$32,814	$0	$0	$0	$31,814	$31,814	$0	$0	$0	$0	$0	$0	$0	$0	$31,814	$31,814	$0	$0	$0	$0	$0	$96,442	
		0005	Optimized Exit Strategy	AFCEC Approval of Optimized Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,697	$31,371	$33,068	$33,068	
									$0					$0					$0					$0							
			SITE SUBTOTAL						$38,283					$37,283					$5,469					$37,283					$38,537	$156,855	$ 31,371
LF007Landfill 5	Optimized Exit Strategy	0005	Annual Inspection and Repairs	Letter report to AFCEC documenting inspection dates and repairs made. Copies to EPA and NYSDEC but approvals not warranted.	$0	$3,038	$0	$0	$3,038	$0	$3,038	$0	$0	$3,038	$0	$3,038	$0	$0	$3,038	$0	$3,038	$0	$0	$3,038	$0	$3,038	$0	$0	$3,038	$15,190	
		0005	Final Groundwater Monitoring and Reporting	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$21,268	$21,268	$0	$0	$0	$20,268	$20,268	$0	$0	$0	$0	$0	$0	$0	$0	$20,268	$20,268	$0	$0	$0	$0	$0	$61,804	
		0005	Optimized Exit Strategy	AFCEC Approval of Optimized Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,190	$21,546	$30,736	$30,736	
									$0					$0					$0					$0							
			SITE SUBTOTAL						$24,307					$23,306					$3,038					$23,306					$33,774	$107,731	$ 21,546
LF009/Landfill 6	Optimized Exit Strategy	0005	Annual Inspection and Repairs	Letter report to AFCEC documenting inspection dates and repairs made. Copies to EPA and NYSDEC but approvals not warranted.	$0	$6,077	$0	$0	$6,077	$0	$6,077	$0	$0	$6,077	$0	$6,077	$0	$0	$6,077	$0	$6,077	$0	$0	$6,077	$0	$6,077	$0	$0	$6,077	$30,384	
		0005	Final Groundwater Monitoring and Reporting	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$44,968	$44,968	$0	$0	$0	$43,968	$43,968	$0	$0	$0	$43,468	$43,468	$0	$0	$0	$43,968	$43,968	$0	$0	$0	$0	$0	$176,372	
		0005	Optimized Exit Strategy	AFCEC Approval of Optimized Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,195	$54,112	$63,307	$63,307	
									$0					$0					$0					$0							
			SITE SUBTOTAL						$51,044					$50,045					$49,545					$50,045					$69,384	$270,063	$ 54,013
SD031/Three Mile Creek	Closure with No Restrictions	0005	Final Tissue and Sediment Sampling Report and Reporting	Acceptance of Final Tissue and Sediment Sampling Report by AFCEC, USEPA and NYSDEC	$0	$0	$0	$34,030	$34,030	$0	$0	$0	$0	$0	$0	$173,372	$0	$0	$173,372	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$207,402	
		0005	Site Closure Unrestricted Use - 3 Mile Creek	Acceptance SD031 Final Closure Report by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,923	$0	$0	$0	$10,923	$0	$0	$0	$0	$0	$0	$0	$0	$54,706	$54,706	$65,629	
		0005	Five Year Review Document	Acceptance of Final Five Year Review Document by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
									$0					$0					$0					$0							
			SITE SUBTOTAL						$34,030					$0					$184,295					$0					$54,706	$273,031	$ 54,606

Site Identifier (from Enclosure 1 of the PWS)	Proposed Site Objective (Contractor to select one from Section 1.5 of the PWS)	CLIN	Performance Milestone (Specified by the Contractor)	Performance Metric (Specified by the Contractor to support payment)	Payment Schedule Year 1 (CY2011) Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Total	Payment Schedule Year 2 (CY2012) Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Total	Payment Schedule Year 3 (CY2013) Jan-Mar 2013	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Total	Payment Schedule Year 4 (CY2014) Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Oct-Dec 2014	Total	Payment Schedule Year 5 (CY2015) Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total	Contract Total	Retainage Pending Goal Achievement
		0005	Final Tissue and Sediment Sampling Report and Reporting	Acceptance of Final Tissue and Sediment Sampling Report by AFCEC, USEPA and NYSDEC	$0	$0	$0	$30,384	$30,384	$0	$0	$0	$0	$0	$0	$147,919	$0	$0	$147,919	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$178,303	

SD032/Six Mile Creek	Closure with No Restrictions	0005	Site Closure Unrestricted Use - 6 Mile Creek	Acceptance SD031 Final Closure Report by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,119	$0	$0	$7,119	$0	$0	$0	$0	$0	$0	$0	$0	$46,356	$46,356	$53,475	
		0005	Five Year Review Document	Acceptance of Final Five Year Review Document by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
									$0					$0				$0					$0							
			SITE SUBTOTAL						$30,384					$0				$156,038					$0				$46,356	$231,778	$	46,356

SD052/Soil Vapor Intrusion System	Optimized Exit Strategy	0005	Operation and Optimization of SVI system	Acceptance of Quarterly O&M Reports by AFCEC, USEPA and NYSDEC	$0	$0	$0	$35,460	$35,460	$35,460	$32,384	$32,384	$32,384	$132,612	$35,460	$32,384	$32,384	$32,384	$132,612	$35,460	$32,384	$32,384	$32,384	$132,612	$32,384	$32,384	$60,767	$0	$125,535	$558,831	
		0005	Optimized Exit Strategy	AFCEC approval of the Optimization Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,907	$140,934	$145,841	$145,841	
			SITE SUBTOTAL						$35,460					$132,612					$132,612					$132,612					$271,376	$704,672	$ 140,944
SS060/STW 1300 Building 35&36	Closure with No Restrictions	0005	Final Groundwater Monitoring and Reporting	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC	$0	$0	$72,313	$0	$72,313	$0	$13,122	$0	$0	$13,122	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$85,435	
		0005	Monitoring Well Abandonment	Acceptance of Final Monitoring Well Abandonment Monitoring Report by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,723	$9,723	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,723	
		0005	Closure Document	AFCEC approval of the Optimization Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,117	$3,117	$0	$24,569	$0	$0	$24,569	$0	$0	$0	$0	$0	$27,686	
									$0					$0					$0					$0					$0		
			SITE SUBTOTAL						$72,313					$13,122					$12,840					$24,569					$0	$122,844	$ 24,569
ST006	Closure with No Restrictions	0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$29,565	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$29,565	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$21,690	$21,690	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$21,690	
		0005	Risk Assement Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,904	$15,474	$0	$0	$0	$25,378	$0	$0	$0	$0	$0	$25,378	
			SITE SUBTOTAL						$0					$0					$51,179					$25,378					$0	$76,556	$ 15,314
ST006 Option 2	Conduct SVE System Installation and Operation to Achieve Site Closure	0005	SVE System Installation and Operation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,429	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,429	
		0005	SVE System Start Up and O&M Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$75,382	$75,382	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$75,382	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$36,931	$0	$0	$0	$36,931	$0	$0	$0	$0	$0	$36,931	
		0005	SVE System O&M Report 1	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$0	$0	$0	$40,020	$0	$0	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 2	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$0	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 3	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$40,020	$0	$0	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 4	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$0	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 5	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 6	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,020	$0	$0	$0	$40,020	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0005	SVE System O&M Report 7	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$30,889	$9,134	$0	$40,023	
		0005	SVE System Rebound Report/Site Closure/Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$89,053	$0	$89,053	
			SITE SUBTOTAL						$0					$0					$84,811					$197,011					$209,113	$490,935	$ 98,187
SS008/Building 112-PCB Dump Area	Status Quo	0005							$0										$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
DP011/Building 3 Drywell	Closure with No Restrictions	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,404	$0	$0	$0	$17,404	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,404	
									$0					$0					$0					$0					$0		
			SITE SUBTOTAL						$0					$0					$17,404					$0					$0	$17,404	$ 3,481
DP012/Building 301	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
		0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,300	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$31,940	$0	$0	$0	$0	$0	$31,940	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,903	$0	$0	$0	$0	$0	$0	$0	$0	$10,903	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$65,625	$0	$0	$0	$0	$65,625	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,534	$35,822	$0	$44,356	
			SITE SUBTOTAL						$0					$6,077					$19,300					$42,540					$100,281	$174,078	$ 35,820

DP013/Building 255	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
		0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,220	$0	$19,220	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,220	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,670	$0	$0	$0	$40,670	$0	$0	$0	$0	$0	$40,670	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,885	$0	$0	$10,885	$0	$0	$0	$0	$0	$10,885	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$65,260	$0	$0	$0	$65,260	$65,260	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,910	$37,260	$0	$44,170	$44,170	
			SITE SUBTOTAL						$0					$6,077					$19,220					$51,555					$109,430	$186,282	$ 37,256
DP015/Building 219	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
		0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,787	$0	$18,787	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,787	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$23,150	$0	$0	$0	$23,150	$0	$0	$0	$0	$0	$23,150	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,600	$0	$0	$9,600	$0	$0	$0	$0	$0	$9,600	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$47,210	$0	$0	$0	$47,210	$47,210	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,010	$26,459	$0	$0	$27,469	$27,469	
			SITE SUBTOTAL						$0					$6,077					$18,787					$32,750					$74,679	$132,293	$ 26,459
SS017/Lot 69	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
									$0										$0					$0							
			SITE SUBTOTAL						$0					$6,077					$0					$0					$0	$6,077	$ 1,215
DP022/Building 222	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
									$0										$0					$0							
			SITE SUBTOTAL						$0					$6,077					$0					$0					$0	$6,077	$ 1,215
SS023/Building 20	Closure with No Restrictions	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,404	$0	$0	$0	$17,404	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,404	
									$0										$0					$0							
			SITE SUBTOTAL						$0					$0					$17,404					$0					$0	$17,404	$ 3,481
SS024	Closure with No Restrictions	0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,185	$0	$19,185	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,185	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$51,447	$0	$0	$0	$51,447	$0	$0	$0	$0	$0	$51,447	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,500	$0	$0	$0	$10,500	$0	$0	$0	$0	$0	$10,500	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$63,200	$0	$0	$0	$63,200	$63,200	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,294	$37,798	$0	$0	$44,092	$44,092	
			SITE SUBTOTAL						$0					$0					$19,185					$61,947					$107,292	$188,424	$ 37,685
					Payment Schedule Year 1 (CY2011)					Payment Schedule Year 2 (CY2012)					Payment Schedule Year 3 (CY2013)					Payment Schedule Year 4 (CY2014)					Payment Schedule Year 5 (CY2015)						
Site Identifier (from Enclosure 1 of the PWS)	Proposed Site Objective (Contractor to select one from Section 1.5 of the PWS)	CLIN	Performance Milestone (Specified by the Contractor)	Performance Metric (Specified by the Contractor to support payment)	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Total	Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Total	Jan-Mar 2013	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Total	Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Oct-Dec 2014	Total	Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total	Contract Total	Retainage Pending Goal Achievement
SS025/T-9 Storage Area	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$0	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
									$0										$0					$0							
			SITE SUBTOTAL						$0					$0					$6,077					$0					$0	$6,077	$ 1,215
FT030	Closure with No Restrictions	0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$33,215	$0	$33,215	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$33,215	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$32,058	$32,058	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$32,058	
		0005	Risk Assessment Report and Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,038	$18,435	$0	$0	$25,473	$0	$0	$0	$0	$0	$25,473	
			SITE SUBTOTAL						$0					$0					$65,273					$25,473					$0	$90,746	$ 18,149

SS033/Coal Storage Area	Status Quo	0005							$0					$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
ST036/Building 110	Status Quo	0005							$0					$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SS044/PCB Site	Status Quo	0005							$0					$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SD050 Building 214	Optimized Exit Strategy	0005	Removal of Groundwater LUCIC Requirement	Acceptance of LUCIC Removal by AFCEC, USEPA and NYSDEC	$0	$0	$0	$0	$0	$0	$0	$6,077	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
		0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,896	$0	$18,896	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,896	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,122	$0	$0	$0	$18,122	$0	$0	$0	$0	$0	$18,122	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,657	$0	$0	$0	$9,657	$0	$0	$0	$0	$0	$9,657	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,500	$0	$0	$0	$40,500	$40,500	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,376	$24,251	$27,627	$27,627	
			SITE SUBTOTAL						$0					$6,077					$18,896					$27,779					$68,127	$120,879	$ 24,176
SD052-01/Apron 2 Chlorinated Plume	Status Quo	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SD052-02/Building 775 Chlorinated Plume	Status Quo	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SD052-04/Landfill 6 Chlorinated Plume	Status Quo	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SD052-05/Building 817 Chlorinated Plume	Status Quo	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
ST053/Building 133	Closure with No Restrictions	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SS062/AOC 9	Status Quo	0005												$0					$0					$0					$0	$0	
			SITE SUBTOTAL						$0					$0					$0					$0					$0	$0	
SD041/Building 782 Nosedock 1	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$10,276	$0	$0	$0	$10,276	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,276	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$34,073	$34,073	$0	$68,147	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$68,147	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,365	$0	$0	$0	$20,365	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,365	
														$0					$0					$0							
			SITE SUBTOTAL						$78,422					$0					$20,365					$0					$0	$98,787	$ 19,757
SS054/Building 781	Optimized Exit Strategy	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$10,610	$0	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0005	Complete Supplemental Investigation Including Investigation Report	Acceptance of Investigation Report by AFCEC	$0	$201,170	$0	$0	$201,170	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$201,170	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$117,864	$0	$0	$117,864	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$117,864	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$9,537	$9,537	$9,537	$28,611	$9,537	$9,537	$9,537	$9,537	$38,148	$9,537	$9,537	$9,537	$9,537	$38,148	$9,537	$9,537	$9,537	$9,537	$38,148	$9,537	$9,537	$9,537	$9,537	$38,148	$181,203	
		0005	Optimized Exit Strategy	AFCEC approval of the Optimization Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$606	$127,863	$128,469	$128,469	
																			$0					$0							
			SITE SUBTOTAL						$358,254					$38,148					$38,148					$38,148					$166,617	$639,315	$ 127,863
SS020/Tank Farm 1&3	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$0	$168,268	$0	$168,268	$0	$0	$0	$0	$0	$0	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$168,268	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$26,631	$26,631	$5,000	$58,262	$5,000	$58,262	$38,262	$26,631	$128,155	$26,381	$26,381	$26,381	$27,381	$106,524	$26,381	$26,381	$26,381	$27,381	$106,524	$0	$0	$0	$0	$0	$399,465	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$637	$144,708	$0	$0	$145,345	$145,345	
									$0										$0					$0							
			SITE SUBTOTAL						$237,140					$128,155					$106,524					$106,524					$145,345	$723,688	$ 144,738

Site Identifier (from Enclosure 1 of the PWS)	Proposed Site Objective (Contractor to select one from Section 1.5 of the PWS)	CLIN	Performance Milestone (Specified by the Contractor)	Performance Metric (Specified by the Contractor to support payment)	Payment Schedule Year 1 (CY2011) Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Total	Payment Schedule Year 2 (CY2012) Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Total	Payment Schedule Year 3 (CY2013) Jan-Mar 2013	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Total	Payment Schedule Year 4 (CY2014) Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Oct-Dec 2014	Total	Payment Schedule Year 5 (CY2015) Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total	Contract Total	Retainage Pending Goal Achievement
SS063/Apron 1	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$0	$69,069	$0	$69,069	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$69,069	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$20,703	$20,703	$19,703	$61,109	$19,703	$19,703	$19,703	$19,703	$78,812	$19,703	$19,703	$19,703	$0	$59,109	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$199,030	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,207	$70,229	$0	$0	$72,436	$0	$0	$0	$0	$0	$72,436	
			SITE SUBTOTAL						$140,788					$78,812					$59,109					$72,436					$0	$351,145	$ 70,229
ST037/Building 771 NYSDEC Spill # 8903144	Closure with No Restrictions	0005	Site Closure	Acceptance NYSDEC Spill Closure	$4,862	$1,215	$0	$0	$6,077	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,077	
																									$0						
			SITE SUBTOTAL						$6,077					$0					$0					$0					$0	$6,077	$ 1,215
SS064/Apron 2/ NYSDEC Spill # 9713631	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$0	$196,173	$0	$196,173	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$196,173	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$36,144	$36,144	$35,144	$107,432	$35,144	$35,144	$35,144	$35,144	$140,576	$36,144	$36,144	$36,144	$36,144	$144,576	$35,144	$35,144	$35,144	$0	$105,432	$0	$0	$0	$0	$0	$498,016	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,807	$176,151	$178,958	$0	$0	$0	$0	$0	$178,958	
																									$0						
			SITE SUBTOTAL						$314,215					$140,576					$144,576					$284,390					$0	$883,757	$ 176,751
SS065/Building 15/NYSDEC Spill # 9709366	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$8,167	$0	$0	$8,167	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,167	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 2 Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$76,367	$0	$0	$76,367	$0	$0	$0	$0	$0	$0	$0	$0	$0	$76,367	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$15,166	$15,166	$14,166	$44,498	$14,166	$14,166	$14,166	$14,166	$56,664	$14,166	$14,166	$14,166	$14,166	$56,664	$15,166	$14,166	$14,166	$14,166	$57,664	$14,166	$14,166	$14,166	$0	$42,498	$257,988	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,609	$86,532	$90,141	$90,141	
																									$0						
			SITE SUBTOTAL						$52,665					$56,664					$133,031					$57,664					$132,639	$432,683	$ 86,536
SS066/Building 786/NYSDEC Spill # 8910168	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$0	$89,357	$0	$89,357	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$89,357	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$15,576	$15,576	$14,576	$45,728	$14,576	$14,576	$14,576	$14,576	$58,304	$14,576	$14,576	$14,576	$14,576	$58,304	$14,576	$14,576	$14,576	$14,576	$58,304	$14,576	$14,576	$14,576	$0	$43,728	$264,368	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,578	$91,478	$93,056	$93,056	
																									$0						
			SITE SUBTOTAL						$145,695					$58,304					$58,304					$58,304					$136,784	$457,391	$ 91,478
SS067/Building 789/NYSDEC Spill # 9810713	Optimized Exit Strategy	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$8,167	$0	$0	$0	$8,167	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,167	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 2 Report	$0	$148,316	$0	$0	$148,316	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$148,316	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$23,492	$23,492	$22,918	$69,902	$22,492	$22,492	$22,492	$22,492	$89,968	$22,492	$22,492	$22,492	$22,492	$89,968	$22,492	$22,492	$22,492	$22,492	$89,968	$22,492	$22,492	$22,492	$0	$67,476	$407,282	
		0005	Optimized Exit Strategy	AFCEC approval of the Optimization Exit Strategy Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,217	$143,246	$151,463	$151,463	
																									$0						
			SITE SUBTOTAL						$226,385					$89,968					$89,968					$89,968					$216,939	$715,228	$ 143,046
SS068/Building 7001/NYSDEC Spill # 9706957	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 2 Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,558	$0	$0	$66,558	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,558	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$15,932	$15,932	$14,932	$46,796	$15,932	$15,932	$15,932	$14,932	$62,728	$15,932	$15,932	$15,932	$14,932	$62,728	$15,932	$15,932	$15,932	$14,932	$62,728	$14,932	$14,932	$14,932	$0	$44,796	$279,776	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$88,845	$88,845	$88,845	
																									$0						
			SITE SUBTOTAL						$57,406					$62,728					$129,286					$62,728					$133,641	$445,789	$ 89,158

Site Identifier (from Enclosure 1 of the PWS)	Proposed Site Objective (Contractor to select one from Section 1.5 of the PWS)	CLIN	Performance Milestone (Specified by the Contractor)	Performance Metric (Specified by the Contractor to support payment)	Payment Schedule Year 1 (CY2011) Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Total	Payment Schedule Year 2 (CY2012) Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Total	Payment Schedule Year 3 (CY2013) Jan-Mar 2013	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Total	Payment Schedule Year 4 (CY2014) Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Oct-Dec 2014	Total	Payment Schedule Year 5 (CY2015) Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total	Contract Total	Retainage Pending Goal Achievement	
SS069/BFSA/ NYSDEC Spill # 9507364,9810949,& 0009824	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$0	$10,610	$0	$0	$10,610	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,610	
		0001	Implement Remedy Optimization	Acceptance of Remediation Systems Installation and Optimization Report by AFCEC. Volume 1 Report	$0	$0	$82,666	$0	$82,666	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$82,666	
		0005	Conduct Quarterly Monitoring, Operations & Maintenance	Acceptance of Quarterly LTO/LTM Reports by AFCEC	$0	$14,809	$14,809	$13,809	$43,427	$14,809	$14,809	$14,809	$13,809	$58,236	$14,809	$14,809	$14,809	$13,809	$58,236	$13,809	$13,809	$13,809	$0	$41,427	$0	$0	$0	$0	$0	$201,326	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,807	$74,102	$75,909	$0	$0	$0	$0	$0	$75,909	
														$0				$0					$0					$0			
			SITE SUBTOTAL						$130,703					$58,236				$58,236					$117,335					$0	$370,511	$ 74,102	
SS070/Building 150/NYSDEC Spill # 0800273	Closure with No Restrictions	0005	Design/Plan Remedy Optimization	Acceptance of Final Design and Remedy Optimization Documents by AFCEC	$4,801	$0	$0	$0	$4,801	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,801	
		0005	Groundwater Monitoring	Acceptance of Final Data Quality Summary, and Groundwater Monitoring Reports by AFCEC, USEPA and NYSDEC Closure Report	$0	$0	$0	$23,821	$23,821	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$23,821	
		0005	Monitoring Well Abandonment	Acceptance of Final Well Abandonment Report by AFCEC	$0	$0	$0	$0	$0	$4,983	$0	$0	$0	$4,983	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,983	
		0005	Achieve Site Closure	NYSDEC closure of the spill number, any LUC/ICs removed. MWs decommissioning will be deferred to final invoice AFCEC approval of the Closure Report	$0	$0	$0	$0	$0	$0	$9,601	$0	$0	$9,601	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,641	$18,242	
														$0				$0					$0								
			SITE SUBTOTAL						$28,622					$14,584				$0					$0					$8,641	$51,847	$ 10,369	
Unknown Sites	Optimized Exit Strategy	0005	Site Investigation Report	Acceptance of Site Investigation Report by AFCEC, USEPA and NYSDEC	$18,230	$0	$17,231	$0	$35,461	$18,230	$0	$17,230	$0	$35,460	$17,980	$0	$16,976	$0	$34,956	$17,980	$0	$17,230	$0	$35,210	$35,210	$0	$0	$0	$35,210	$176,297		
																														$0		
																														$0		
														$0				$0					$0								
			SITE SUBTOTAL						$35,461					$35,460				$34,956					$35,210					$35,210	$176,297	$ 35,299	
AOI 72	Mod 002 Site Closure	0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,413	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,413	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$47,294	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$47,294	
		0005	Remedial Action Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,828	$0	$10,828	$0	$0	$0	$0	$0	$0	$10,828	
		0005	Remedial Action Completion Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$92,492	$0	$0	$0	$92,492	$92,492	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,945	$41,983	$0	$43,928	$43,928	
			SITE SUBTOTAL						$0					$0				$15,413					$58,294					$134,475	$209,913	$ 41,983	
Building 211	Mod 002 Site Closure	0005	Site Investigation Work Plan	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,977	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,977	
		0005	Site Investigation Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,882	$15,882	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,882	
		0005	Site Closure Report	AFCEC Approval of Draft	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
				AFCEC and Regulatory Approval	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,210	$8,266	$0	$12,476	$0	$0	$0	$0	$0	$0	$12,476	
			SITE SUBTOTAL						$0					$0				$28,859					$12,476					$0	$41,335	$ 8,266	
BASE TOTAL					$304,511	$777,005	$907,141	$514,552	$2,503,208	$210,032	$295,214	$287,447	$434,765	$1,227,458	$315,748	$756,674	$383,930	$515,281	$1,971,630	$535,319	$428,867	$282,129	$654,271	$1,900,586	$581,117	$477,505	$385,691	$1,215,284	$2,659,597	$10,271,120	$1,977,104	

Invoice Number	Amount	Date
Invoices 0001 and 0002 (Paid)	$ 353,246	20-May-11 30-Nov-12
Invoice 0003 (Paid)	$ 1,542,647	30-Jul-12
Invoice 0004 (Paid)	$ 409,605	24-Jan-13
Invoice 0005 (Paid)	$ 761,121	21-May-13
Invoice 0006 (Paid)	$ 299,524	23-Aug-13
Invoice 0007 (Paid)	$ 1,174,203	20-Oct-13
Invoice 0008 (Paid)	$ 522,970	24-Jan-14
Invoice 0009 (Paid)	$ 324,004	23-May-14
Invoice 0010	$ 944,247	5-Sep-14
Invoice 0011	$ 554,688	10-Feb-15
Total Invoiced through 2/10/15	$ 6,886,256	
12-Feb-15	67%	

Note: Red font indicates 20% retainage to be paid with achievement of contract site specific goal. Retainage may be claimed with invoice if contract goals have been achieved and therefore released for payment. 20% retainage not applied to management tasks.

$10,271,120

$0

Contract FA8903-10-D-8595
PERFORMANCE BASED REMEDIATION AT FORMER GRIFFISS AFB, NEW YORK
AF Project No. JREZ20XX7208

Schedule of Values- Invoice # GRI0011

Invoice Period September 20, 2014 - February 21, 2015

NO.	Site	CLIN	DESCRIPTION/MILESTONE	Budget	% Complete	$ Complete	Previously Invoiced	Current Invoice
1.0	Project Management Documents and Activities	0005	PMP and Annual Updates	$ 96,695.00	95%	$ 92,058.00	$ 87,421.00	$ 4,637.00
		0005	PMP Mod 0002 Update	$ 8,442.00	100%	$ 8,442.00	$ 8,422.00	$ -
		0005	Site Wide UFP-QAPP and HSP	$ 106,581.50	95%	$ 101,114.00	$ 101,114.00	$ -
		0005	Site Wide HSP	$ 106,582.50	95%	$ 101,114.00	$ 101,114.00	$ -
		0005	ERPIMS Uploads	$ 33,500.00	75%	$ 25,125.00	$ 16,750.00	$ 8,375.00
		0005	AFCEC Website Uploads	$ 33,500.00	75%	$ 25,125.00	$ 16,750.00	$ 8,375.00
CERCLA SITES								
2.0	5 Year Review Report	0005	5 Year Review Document	$ 97,993.00	0%	$ -	$ -	$ -
3.0	Annual LUC-IC Report for CERCLA Sites	0005	Annual LUC-IC Inspections and Report	$ 384,451.00	57%	$ 218,603.00	$ 218,603.00	$ -
4.0	LF001	0005	Annual Inspection and Repairs	$ 31,599	60.0%	$ 18,960	$ 18,960	$ -
		0005	Final GW Monitoring and Reporting	$ 165,287	74.4%	$ 122,966	$ 122,966	$ -
		0005	Optimized Exit Strategy	$ 82,096	0.0%	$ -	$ -	$ -
5.0	LF002	0005	Annual Inspection and Repairs	$ 18,230	60.0%	$ 10,938	$ 10,938	$ -
		0005	Final GW Monitoring and Reporting	$ 81,859	67.1%	$ 54,906	$ 54,906	$ -
		0005	Optimized Exit Strategy	$ 36,327	0.0%	$ -	$ -	$ -
6.0	LF003	0005	Annual Inspection and Repairs	$ 27,345	60.0%	$ 16,407	$ 16,407	$ -
		0005	Final GW Monitoring and Reporting	$ 96,442	67.0%	$ 64,628	$ 64,628	$ -
		0005	Optimized Exit Strategy	$ 33,068	0.0%	$ -	$ -	$ -
7.0	LF007	0005	Annual Inspection and Repairs	$ 15,190	60.0%	$ 9,114	$ 9,114	$ -

		0005	Final GW Monitoring and Reporting	$	61,804	67.2%	$ 41,536	$ 41,536	$ -
		0005	Optimized Exit Strategy	$	30,736	0.0%	$ -	$ -	$ -
8.0	LF009	0005	Annual Inspection and Repairs	$	30,384	60.0%	$ 18,231	$ 18,231	$ -
		0005	Final GW Monitoring and Reporting	$	176,372	75.1%	$ 132,404	$ 132,404	$ -
		0005	Optimized Exit Strategy	$	63,307	0.0%	$ -	$ -	$ -
9.0	SD031	0005	Final Tissue&Sediment Sampling Report and Reporting	$	207,402	100.0%	$ 207,402	$ 207,402	$ -
		0005	Achieve Site Closure Unrestricted Use 3 Mile Creek	$	65,629	100.0%	$ 65,628	$ 65,628	$ -
10.0	SD032	0005	Final Tissue &Sediment Sampling Report and Reporting	$	178,303	100.0%	$ 178,303	$ 178,303	$ -
		0005	Achieve Site Closure Unrestricted Use 6 Mile Creek	$	53,475	100.0%	$ 53,475	$ 53,475	$ -
11.0	SD052	0005	Operation and Optimization of SVI System	$	558,831	65.9%	$ 368,528	$ 300,684	$ 67,844
		0005	Optimized Exit Strategy	$	145,841	0.0%	$ -	$ -	$ -
12.0	SS060	0005	Final GW Monitoring and Reporting	$	85,435	100.0%	$ 85,435	$ 85,435	$ -
		0005	MW P&A	$	9,723	100.0%	$ 9,723	$ 9,723	$ -
		0005	Closure Document	$	27,686	100.0%	$ 27,686	$ 27,686	$ -
13.0	ST006	0005	SI Work Plan	$	29,500	100.0%	$ 29,500	$ 29,500	$ -
		0005	SI Report	$	21,690	100.0%	$ 21,690	$ 21,690	$ -
		0005	Risk Assessment Report (Part of SI Report)	$	25,378	0.0%	$ -	$ -	$ -
14.0	ST006 Mod 0002 Option 2	0005	SVE System Installation and Operation Work Plan	$	9,429	100.0%	$ 9,429	$ 9,429	$ -
		0005	SVE System Startup and O&M Report	$	112,313	100.0%	$ 112,313	$ 75,382	$ 36,931
		0005	SVE System O&M Report 1	$	40,020	100.0%	$ 40,020	$ -	$ 40,020
		0005	SVE System O&M Report 2	$	40,020	100.0%	$ 40,020	$ -	$ 40,020
		0005	SVE System O&M Report 3	$	40,020	0.0%	$ -	$ -	$ -
		0005	SVE System O&M Report 4	$	40,020	0.0%	$ -	$ -	$ -
		0005	SVE System O&M Report 5	$	40,020	0.0%	$ -	$ -	$ -
		0005	SVE System O&M Report 6	$	40,020	0.0%	$ -	$ -	$ -
		0005	SVE System O&M Report 7	$	40,020	0.0%	$ -	$ -	$ -
		0005	SVE System Rebound Report/Site Closure Report	$	89,053	0.0%	$ -	$ -	$ -
15.0	DP011	0005	Removal of GW LUC/IC Requirement	$	17,404	100.0%	$ 17,404	$ 17,404	$ -
16.0	DP012	0005	Removal of GW LUC/IC Requirement	$	6,077	100.0%	$ 6,077	$ 6,077	$ -
		0005	SI Work Plan	$	19,300	100.0%	$ 19,300	$ 19,300	$ -
		0005	SI Report	$	31,940	100.0%	$ 31,940	$ 31,940	$ -
		0005	Remedial Action Work Plan	$	10,900	100.0%	$ 10,900	$ 10,900	$ -
		0005	Remedial Action Completion Report	$	65,625	0.0%	$ -	$ -	$ -
		0005	Site Closure Report	$	44,256	0.0%	$ -	$ -	$ -
17.0	DP013	0005	Removal of GW LUC/IC Requirement	$	6,077	100.0%	$ 6,077	$ 6,077	$ -
		0005	SI Work Plan	$	19,220	100.0%	$ 19,220	$ 19,220	$ -
		0005	SI Report	$	40,670	100.0%	$ 40,670	$ 40,670	$ -
		0005	Remedial Action Work Plan	$	10,885	100.0%	$ 10,885	$ 10,885	$ -
		0005	Remedial Action Completion Report	$	65,260	0.0%	$ -	$ -	$ -
		0005	Site Closure Report	$	44,170	0.0%	$ -	$ -	$ -
18.0	DP015	0005	Removal of GW LUC/IC Requirement	$	6,077	100.0%	$ 6,077	$ 6,077	$ -
		0005	SI Work Plan	$	18,787	100.0%	$ 18,787	$ 18,787	$ -
		0005	SI Report	$	23,150	100.0%	$ 23,150	$ 23,150	$ -
		0005	Remedial Action Work Plan	$	9,600	100.0%	$ 9,600	$ 9,600	$ -

		0005	Remedial Action Completion Report	$ 47,210	0.0%	$ -	$ -	$ -
		0005	Site Closure Report	$ 27,469	0.0%	$ -	$ -	$ -
19.0	SS017	0005	Removal of GW LUC/IC Requirement	$ 6,077	100.0%	$ 6,077	$ 6,077	$ -
20.0	DP022	0005	Removal of GW LUC/IC Requirement	$ 6,077	100.0%	$ 6,077	$ 6,077	$ -
21.0	SS023	0005	Removal of GW LUC/IC Requirement	$ 17,404	100.0%	$ 17,404	$ 17,404	$ -
22.0	SS024	0005	SI Work Plan	$ 19,185	100.0%	$ 19,185	$ 19,185	$ -
			SI Report	$ 51,447	100.0%	$ 51,447	$ 51,447	$ -
			Remedial Action Work Plan	$ 10,500	100.0%	$ 10,500	$ 10,500	$ -
			Remedial Action Completion Report	$ 63,200	0.0%	$ -	$ -	$ -
			Site Closure Report	$ 44,092	0.0%	$ -	$ -	$ -
23.0	SS025	0005	Removal of GW LUC/IC Requirement	$ 6,077	100.0%	$ 6,077	$ 6,077	$ -
24.0	FT030	0005	SI Work Pan	$ 33,215	100.0%	$ 33,215	$ 33,215	$ -
		0005	SI Report	$ 32,058	100.0%	$ 32,058	$ 32,058	$ -
		0005	Closure Report and Risk Assessment	$ 25,473	0.0%	$ -	$ -	$ -
25.0	SD050	0005	Removal of GW LUC/IC Requirement	$ 6,077	100.0%	$ 6,077	$ 6,077	$ -
		0005	SI Work Plan	$ 18,896	100.0%	$ 18,896	$ 18,896	$ -
		0005	SI Report	$ 18,122	100.0%	$ 18,122	$ 18,122	$ -
		0005	Remedial Action Work Plan	$ 9,657	100.0%	$ 9,657	$ 9,657	$ -
		0005	Remedial Action Completion Report	$ 40,500	0.0%	$ -	$ -	$ -
		0005	Site Closure Report	$ 27,627	0.0%	$ -	$ -	$ -
PETROLEUM SITES								
26.0	SD041	0005	Design/Plan Remedy Optimization	$ 10,276	100.0%	$ 10,276	$ 10,276	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 68,147	100.0%	$ 68,147	$ 68,147	$ -
		0005	Achieve Site Closure	$ 20,365	0.0%	$ -	$ -	$ -
27.0	SS054	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0005	Complete Supplemental Investigation/Investigation Report	$ 201,170	100.0%	$ 201,170	$ 201,170	$ -
		0001	Implement Remedy Optimization	$ 117,864	100.0%	$ 117,864	$ 117,864	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 181,200	57.9%	$ 104,907	$ 95,370	$ 9,537
		0005	Optimized Exit Strategy	$ 128,469	0.0%	$ -	$ -	$ -
28.0	SS020	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0001	Implement Remedy Optimization	$ 168,268	100.0%	$ 168,268	$ 168,268	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 399,465	100.0%	$ 399,458	$ 399,458	$ -
		0005	Achieve Site Closure	$ 145,345	0.4%	$ 637	$ 637	$ -
29.0	SS063	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0001	Implement Remedy Optimization	$ 69,069	100.0%	$ 69,069	$ 69,069	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 199,030	100.0%	$ 199,030	$ 199,030	$ -
		0005	Achieve Site Closure	$ 72,436	0.0%	$ -	$ -	$ -
30.0	ST037	0005	Achieve Site Closure	$ 6,077	100.0%	$ 6,077	$ 6,077	$ -
31.0	SS064	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0001	Implement Remedy Optimization	$ 196,173	100.0%	$ 196,173	$ 196,173	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 498,016	78.8%	$ 392,584	$ 356,440	$ 36,144
		0005	Achieve Site Closure	$ 178,958	0.0%	$ -	$ -	$ -
32.0	SS065	0005	Design/Plan Remedy Optimization	$ 8,167	100.0%	$ 8,167	$ 8,167	$ -
		0001	Implement Remedy Optimization	$ 76,367	100.0%	$ 76,367	$ 76,367	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 257,988	100.0%	$ 257,988	$ 257,988	$ -
		0005	Achieve Site Closure	$ 90,141	100.0%	$ 90,141	$ 90,141	$ -
33.0	SS066	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -

		0001	Implement Remedy Optimization	$ 89,357	100.0%	$ 89,357	$ 89,357	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 264,368	100.0%	$ 264,368	$ 147,760	$ 116,608
		0005	Achieve Site Closure	$ 93,056	1.7%	$ 1,578	$ -	$ 1,578
34.0	SS067	0005	Design/Plan Remedy Optimization	$ 8,167	100.0%	$ 8,167	$ 8,167	$ -
		0001	Implement Remedy Optimization	$ 148,316	100.0%	$ 148,316	$ 148,316	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 407,284	61.3%	$ 249,838	$ 227,346	$ 22,492
		0005	Achieve Site Closure	$ 151,463	0.0%	$ -	$ -	$ -
35.0	SS068	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0001	Implement Remedy Optimization	$ 66,558	100.0%	$ 66,558	$ 66,558	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 279,776	100.0%	$ 279,776	$ 157,320	$ 122,456
		0005	Achieve Site Closure	$ 88,845	0.0%	$ -	$ -	$ -
36.0	SS069	0005	Design/Plan Remedy Optimization	$ 10,610	100.0%	$ 10,610	$ 10,610	$ -
		0001	Implement Remedy Optimization	$ 82,666	100.0%	$ 82,666	$ 82,666	$ -
		0005	Conduct Quarterly Monitoring O&M	$ 201,326	100.0%	$ 201,326	$ 201,326	$ -
		0005	Achieve Site Closure	$ 75,909	100.0%	$ 75,909	$ 75,909	$ -
37.0	SS070	0005	Design/Plan Remedy Optimization	$ 4,801	100.0%	$ 4,801	$ 4,801	$ -
		0005	Final GW Monitoring and Reporting	$ 23,821	100.0%	$ 23,821	$ 23,821	$ -
		0005	MW P&A	$ 4,983	100.0%	$ 4,983	$ 4,983	$ -
		0005	Achieve Site Closure	$ 18,242	100.0%	$ 18,242	$ 18,242	$ -
45.0	Unknown Sites	0005	Site Investigation Report	$ 176,297	30.5%	$ 53,691	$ 18,230	$ 35,461
53.0	AO1 72 Mod 2	005	Site Investigation Work Plan	$ 15,410	100.0%	$ 15,410	$ 15,410	$ -
		005	Site Investigation Report	$ 47,256	100.0%	$ 47,256	$ 47,256	$ -
		005	Remedial Action Work Plan	$ 10,828	100.0%	$ 10,828	$ 10,828	$ -
		005	Remedial Action Completion Report	$ 92,492	0.0%	$ -	$ -	$ -
		005	Site Closure Report	$ 43,928	0.0%	$ -	$ -	$ -
54.0	DW211 Mod 2	005	Site Investigation Work Plan	$ 12,972	100.0%	$ 12,972	$ 12,972	$ -
		005	Site Investigation Report	$ 15,882	100.0%	$ 15,882	$ 15,882	$ -
		005	Site Closure Report	$ 12,476	33.7%	$ 4,210	$ -	$ 4,210
			TOTAL	$ 10,271,120	67.04%	$ 6,886,250	$ 6,331,542	$ 554,688

$0.00

Respectfully submitted by CAPE.

CAPE Approval

Philip C Dula

Philip Dula, Project Manager **2/21/2015**

APPENDIX D

STAKEHOLDER CONTACT INFORMATION

Contact Information

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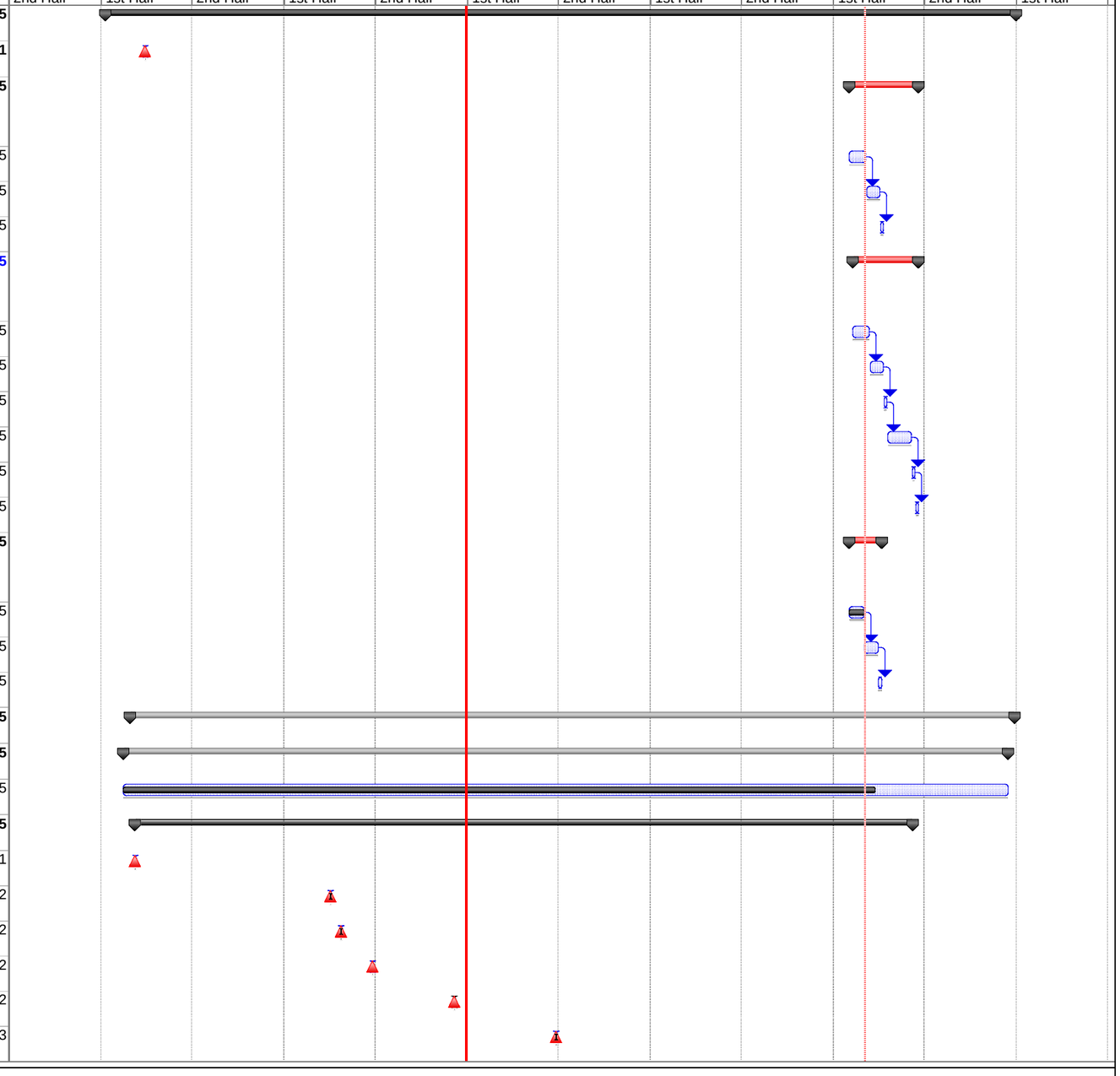
APPENDIX E

PROJECT SCHEDULE

Performance Based Remediation Task Order for Former Griffiss Air Force Base, New York
FA8903-10-D-8595 Delivery Order 0014
Updated 3/6/15

ID	Task Name	Duration	Start	Finish
1	**Griffiss AFB IMS Project Duration POP**	**1299 days**	**Mon 1/10/11**	**Thu 12/31/15**
2	**Kick Off Meeting at Griffiss AFB**	**2 days**	**Wed 3/30/11**	**Thu 3/31/11**
3	**Final PMP Revision (2010, 2011, 2012, 2013, and 2014 revisions completed).**	**100 days**	**Mon 2/2/15**	**Fri 6/19/15**
4	PMP Updates Draft 2015	25 days	Mon 2/2/15	Fri 3/6/15
5	Air Force Review of Draft 2015 PMP Update	20 days	Mon 3/9/15	Fri 4/3/15
6	Final 2015 PMP Update	5 days	Mon 4/6/15	Fri 4/10/15
7	**Final UFP QAPP Revision (2010, 2011, 2012, 2013, and 2014 revisions completed).**	**95 days**	**Mon 2/9/15**	**Fri 6/19/15**
8	2015 Draft UFP-QAPP Update	25 days	Mon 2/9/15	Fri 3/13/15
9	AFCEC Review 2015 Draft UFP-QAPP Update	20 days	Mon 3/16/15	Fri 4/10/15
10	Preparation of Draft Final 2015 UFP-QAPP	5 days	Mon 4/13/15	Fri 4/17/15
11	AFCEC and Regulatory Review of 2015 UFP QAPP Update	35 days	Mon 4/20/15	Fri 6/5/15
12	Preparation of Final 2015 UFP-QAPP	5 days	Mon 6/8/15	Fri 6/12/15
13	Submittal of Final 2015 UFP-QAPP Update	5 days	Mon 6/15/15	Fri 6/19/15
14	**Final SSHP Revisions (2010, 2011,2012, 2013, and 2014 revisions completed).**	**47 days**	**Mon 2/2/15**	**Tue 4/7/15**
15	2015 Draft SSHP Update	22 days	Mon 2/2/15	Tue 3/3/15
16	Air Force Review of Draft 2015 SSHP Update	20 days	Wed 3/4/15	Tue 3/31/15
17	Final 2015 SSHP Update	5 days	Wed 4/1/15	Tue 4/7/15
18	**Monthly Progress Meetings**	**1261 days**	**Mon 2/28/11**	**Mon 12/28/15**
20	**CPSMR Monthly Progress Reports**	**1261 days**	**Tue 2/15/11**	**Tue 12/15/15**
21	CPSMR Monthly Progress Reports	1261 days	Tue 2/15/11	Tue 12/15/15
22		**1108 days**	**Thu 3/10/11**	**Mon 6/8/15**
23	Semiannual Meeting 1	2 days	Thu 3/10/11	Fri 3/11/11
24	Semiannual Meeting 2	1 day	Tue 4/3/12	Tue 4/3/12
25	Semiannual Meeting 3	1 day	Tue 4/24/12	Tue 4/24/12
26	Semiannual Meeting 4	1 day	Tue 6/26/12	Tue 6/26/12
27	Semiannual Meeting 5	1 day	Thu 12/6/12	Thu 12/6/12
28	Semiannual Meeting 6	1 day	Thu 6/27/13	Thu 6/27/13



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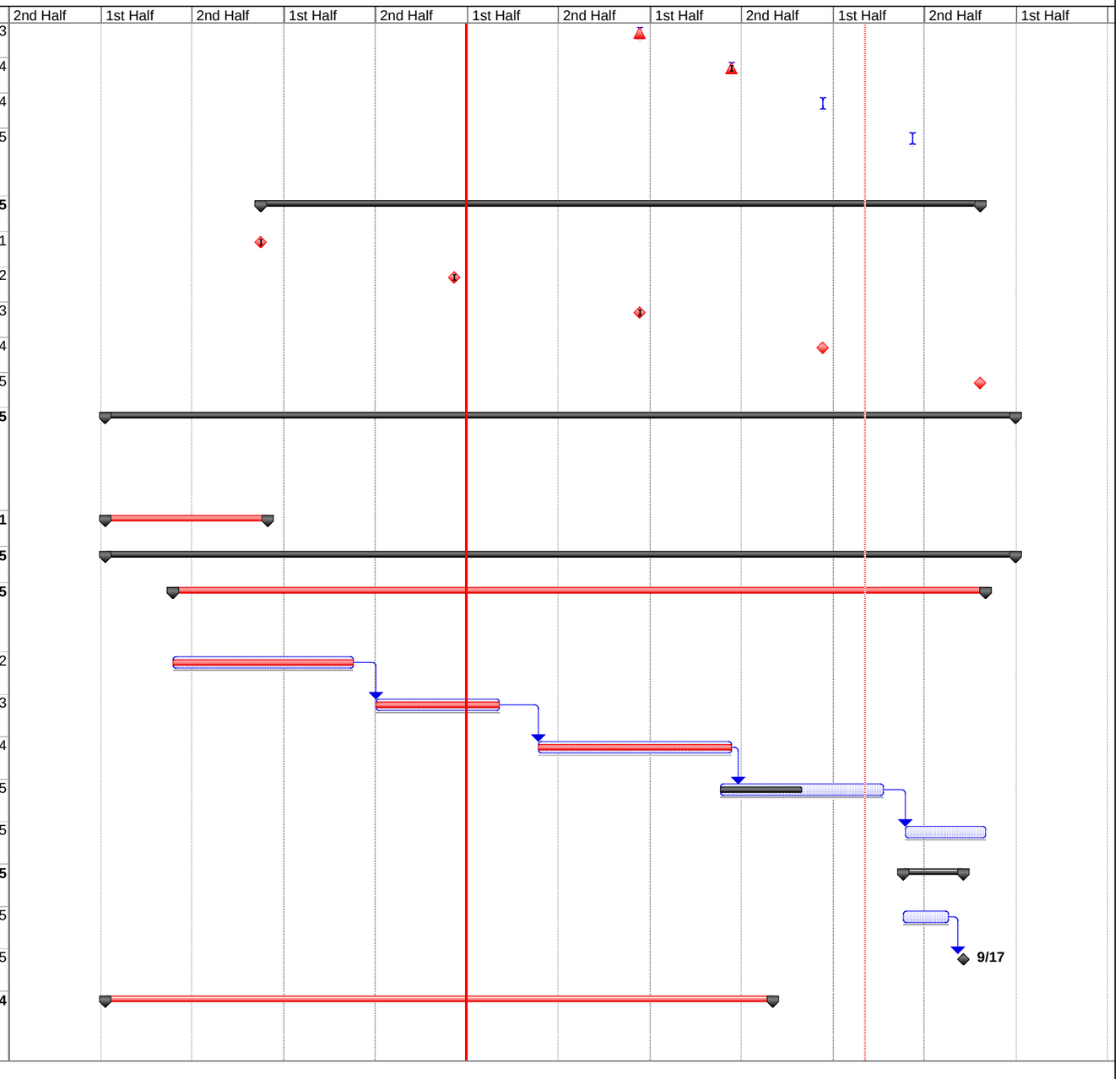
ID	Task Name	Duration	Start	Finish
29	Semiannual Meeting 7	1 day	Wed 12/11/13	Wed 12/11/13
30	Semiannual Meeting 8	1 day	Thu 6/12/14	Thu 6/12/14
31	Semiannual Meeting 9 (Postponed due to Winter Storm Damon)	1 day	Thu 12/11/14	Thu 12/11/14
32	Semiannual Meeting 10 (Combine with Meeting 9 and move up to early May 2015?)	1 day	Mon 6/8/15	Mon 6/8/15
33	**RAB/BCT Meeting**	**1026 days**	**Wed 11/16/11**	**Wed 10/21/15**
34	RAB/BCT Meeting 1	1 day	Wed 11/16/11	Wed 11/16/11
35	RAB/BCT Meeting 2	1 day	Thu 12/6/12	Thu 12/6/12
36	RAB/BCT Meeting 3	1 day	Wed 12/11/13	Wed 12/11/13
37	RAB/BCT Meeting 4 (Postponed. Reschedule Early May 2015)	1 day	Thu 12/11/14	Thu 12/11/14
38	RAB/BCT Meeting 5	1 day	Wed 10/21/15	Wed 10/21/15
39	**Landfill Sites (LF001 - Landfill 1, LF002-Landfill 2/3, LF003-Landfill 7, LF007-Landfill 5, and LF009-Landfill 6) Optimized Exit Strategy**	**1298 days**	**Mon 1/10/11**	**Thu 12/31/15**
40	**LF - Planning Documents (Completed)**	**232 days**	**Mon 1/10/11**	**Wed 11/30/11**
43	**LF - Field Work (Completed)**	**1298 days**	**Mon 1/10/11**	**Thu 12/31/15**
49	**LF - Reporting (Annual Reports completed for 2011, 2012, and 2013)**	**1158 days**	**Tue 5/24/11**	**Sun 11/1/15**
50	LF - Annual Monitoring Report - Year 1-2011	360 edays	Tue 5/24/11	Fri 5/18/12
51	LF - Annual Monitoring Report - Year 2-2012	246 edays	Tue 7/3/12	Wed 3/6/13
52	LF - Annual Monitoring Report - Year 3-2013	385 edays	Wed 5/22/13	Wed 6/11/14
53	LF - Annual Monitoring Report - Year 4-2014	325 edays	Tue 5/20/14	Fri 4/10/15
54	LF - Annual Monitoring Report - Year 5-2015	160 edays	Mon 5/25/15	Sun 11/1/15
55	**LF - Optimized Exit Strategy**	**86 days**	**Wed 5/20/15**	**Thu 9/17/15**
56	LF - Optimized Exit Strategy Document	90 edays	Wed 5/20/15	Tue 8/18/15
57	LF - Acceptance of Optimized Exit Strategy Document	0 days	Thu 9/17/15	Thu 9/17/15
58	**SD031 - Three Mile Creek (Closure Unrestricted Use) Closure Approval 9/2/14.**	**952 days**	**Mon 1/10/11**	**Tue 9/2/14**



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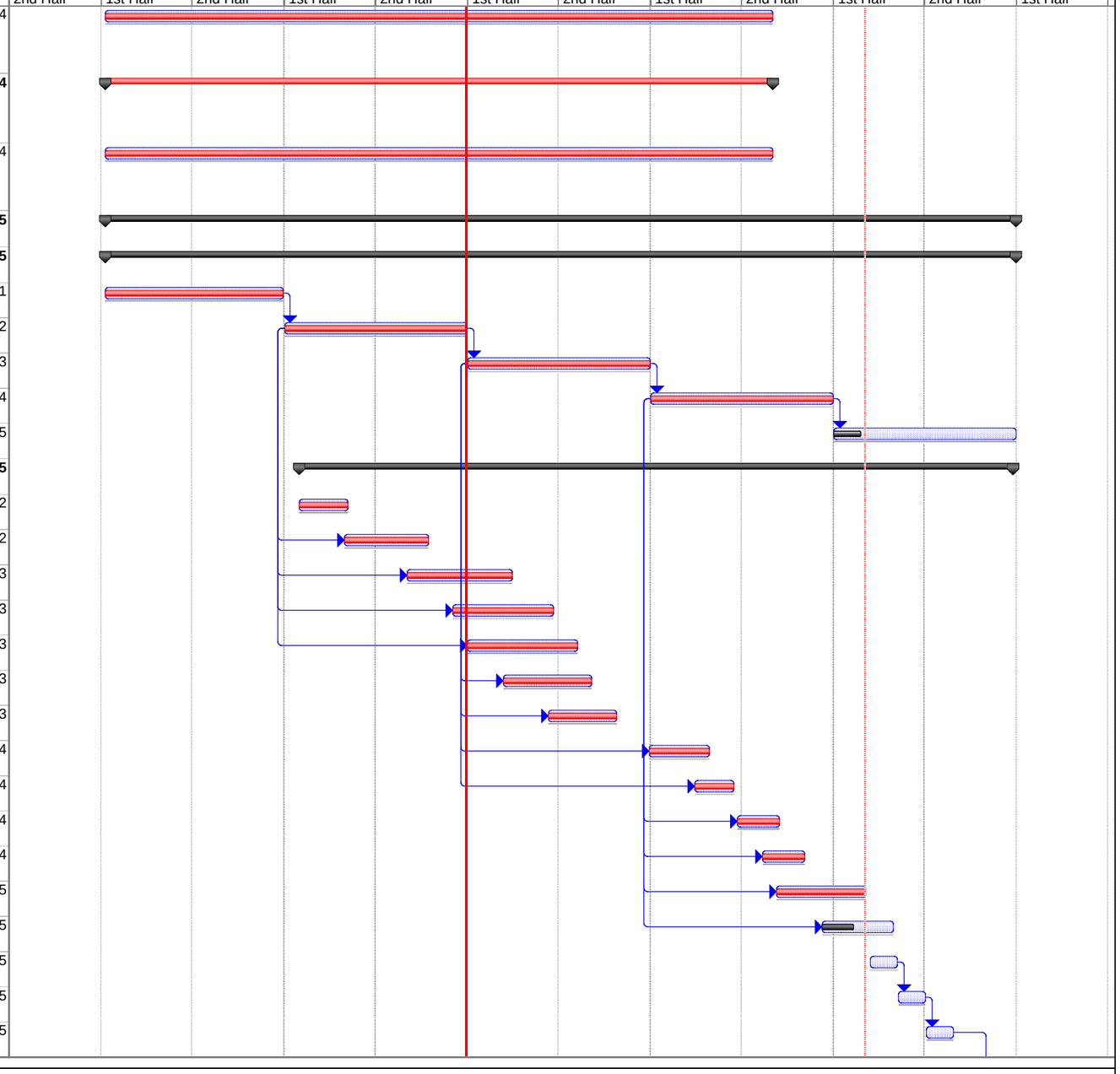
ID	Task Name	Duration	Start	Finish
59	**SD031 - Achieve Site Closure**	952 days	Mon 1/10/11	Tue 9/2/14
60	**SD032 - Six Mile Creek (Closure Unrestricted Use) Closure Approval 9/2/14.**	**952 days**	**Mon 1/10/11**	**Tue 9/2/14**
61	**SD032 - Achieve Site Closure**	952 days	Mon 1/10/11	Tue 9/2/14
62	**SD052 - SVI Systems (Optimized Exit Strategy)**	**1299 days**	**Mon 1/10/11**	**Thu 12/31/15**
63	**SD052 - Field Work**	**1299 days**	**Mon 1/10/11**	**Thu 12/31/15**
64	SD052 - O&M and Monitoring Year 1-2011	355 edays	Mon 1/10/11	Sat 12/31/11
65	SD052 - O&M and Monitoring Year 2-2012	364 edays	Mon 1/2/12	Mon 12/31/12
66	SD052 - O&M and Monitoring Year 3-2013	364 edays	Tue 1/1/13	Tue 12/31/13
67	SD052 - O&M and Monitoring Year 4-2014	364 edays	Wed 1/1/14	Wed 12/31/14
68	SD052 - O&M and Monitoring Year 5-2015	364 edays	Thu 1/1/15	Thu 12/31/15
69	**SD052 - Reporting**	**1018 days**	**Wed 2/1/12**	**Fri 12/25/15**
70	SD052 - O&M and Quarterly Monitoring Report - Year 1 Q4	69 days	Wed 2/1/12	Mon 5/7/12
71	SD052 - O&M and Quarterly Monitoring Report - Year 2 Q1	168 edays	Tue 5/1/12	Tue 10/16/12
72	SD052 - O&M and Quarterly Monitoring Report - Year 2 Q2	210 edays	Mon 9/3/12	Mon 4/1/13
73	SD052 - O&M and Quarterly Monitoring Report - Year 2 Q3	201 edays	Mon 12/3/12	Sat 6/22/13
74	SD052 - O&M and Quarterly Monitoring Report - Year 2 Q4	220 edays	Tue 1/1/13	Fri 8/9/13
75	SD052 - O&M and Quarterly Monitoring Report - Year 3 Q1	176 edays	Wed 3/13/13	Thu 9/5/13
76	SD052 - O&M and Quarterly Monitoring Report - Year 3 Q2	98 days	Wed 6/12/13	Fri 10/25/13
77	SD052 - O&M and Quarterly Monitoring Report - Year 3 Q3	86 days	Mon 12/30/13	Mon 4/28/14
78	SD052 - O&M and Quarterly Monitoring Report - Year 3 Q4	56 days	Mon 3/31/14	Mon 6/16/14
79	SD052 - O&M and Quarterly Monitoring Report - Year 4 Q1	60 days	Tue 6/24/14	Mon 9/15/14
80	SD052 - O&M and Quarterly Monitoring Report - Year 4 Q2	60 days	Wed 8/13/14	Tue 11/4/14
81	SD052 - O&M and Quarterly Monitoring Report - Year 4 Q3	128 days	Wed 9/10/14	Fri 3/6/15
82	SD052 - O&M and Quarterly Monitoring Report - Year 4 Q4	102 days	Wed 12/10/14	Thu 4/30/15
83	SD052 - O&M and Quarterly Monitoring Report - Year 5 Q1	40 days	Mon 3/16/15	Fri 5/8/15
84	SD052 - O&M and Quarterly Monitoring Report - Year 5 Q2	40 days	Mon 5/11/15	Fri 7/3/15
85	SD052 - O&M and Quarterly Monitoring Report - Year 5 Q3	40 days	Mon 7/6/15	Fri 8/28/15



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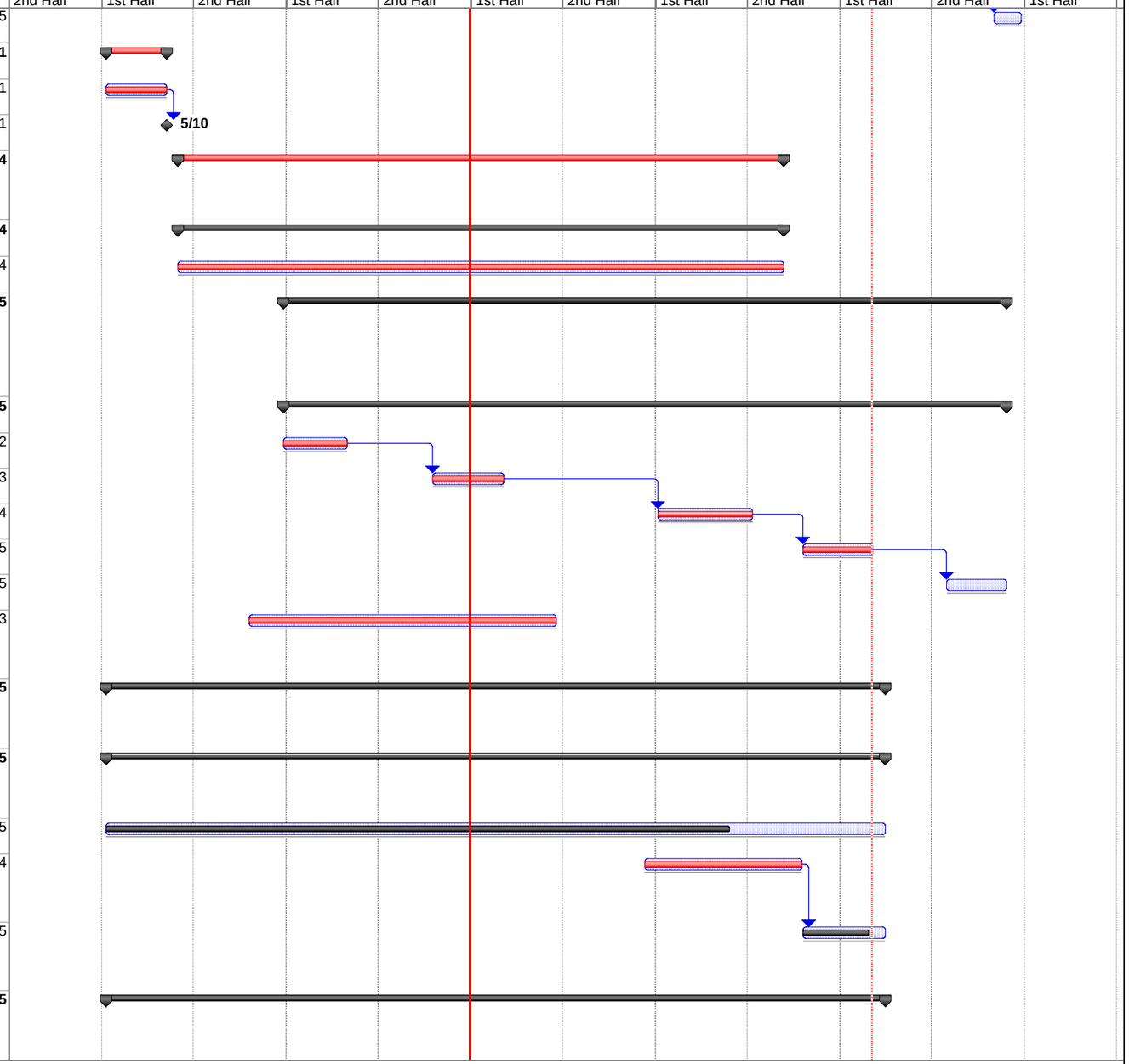
ID	Task Name	Duration	Start	Finish
86	SD052 - O&M and Quarterly Monitoring Report - Year 5 Q4	40 days	Mon 11/2/15	Fri 12/25/15
87	**SD052 - Optimized Exit Strategy**	**86 days**	**Mon 1/10/11**	**Tue 5/10/11**
88	SD052 - Optimized Exit Strategy Document	120 edays	Mon 1/10/11	Tue 5/10/11
89	SD052 - Acceptance of Optimized Exit Strategy Document	0 days	Tue 5/10/11	Tue 5/10/11
90	**SS060 - STW-1300 (Bldg. 35/36) (Closure with Restrictions) Closure Approval 9/11/14)**	**857 days**	**Wed 6/1/11**	**Thu 9/11/14**
91	**SS060 - Site Closure**	**857 days**	**Wed 6/1/11**	**Thu 9/11/14**
92	**SS060 - Site Closure**	857 days	Wed 6/1/11	Thu 9/11/14
93	**Status Quo LUC-IC Sites (ST006, SS024, FT030, SS033, ST036, SS044, SD052-1, -2, -4 &-5, SS062, AOI72, and Building 211)**	**1023 days**	**Tue 12/27/11**	**Fri 11/27/15**
94	**Status Quo CERCLA LUCIC Inspection Sites**	**1023 days**	**Tue 12/27/11**	**Fri 11/27/15**
95	Status Quo Sites - LUCIC Inspection Report - Year 1-2011	90 days	Tue 12/27/11	Mon 4/30/12
96	Status Quo Sites- LUCIC Inspection Report - Year 2-2012	101 days	Wed 10/17/12	Wed 3/6/13
97	Status Quo Sites - LUCIC Inspection Report - Year 3-2013	135 days	Mon 1/6/14	Fri 7/11/14
98	Status Quo Sites - LUCIC Inspection Report - Year 4-2014	100 days	Mon 10/20/14	Fri 3/6/15
99	Status Quo Sites - LUCIC Inspection Report - Year 5-2015	119 edays	Fri 7/31/15	Fri 11/27/15
100	**DP011 - Building 3 (Closure with no Restrictions) Site Closure Approved 6/18/13**	434 days	Thu 10/20/11	Tue 6/18/13
101	**DP012 - Building 301 (Mod 2-Closure with No Restrictions) Closure Pending**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**
102	**DP012 - Unrestricted Site Closure and LUC/IC Inspections until Closure Achieved**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**
103	LUC/IC Inspections and Reporting 2011-2015	1102 days	Mon 1/10/11	Tue 3/31/15
104	DP012 Prepare and Submit Closure Report	223 days	Wed 12/11/13	Fri 10/17/14
105	DP012 - AFCEC & NYSDEC Review and Acceptance of Closure Report	117 days	Mon 10/20/14	Tue 3/31/15
106	**DP013 - Building 255 (Mod 2-Closure with No Restrictions) Closure Pending**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**



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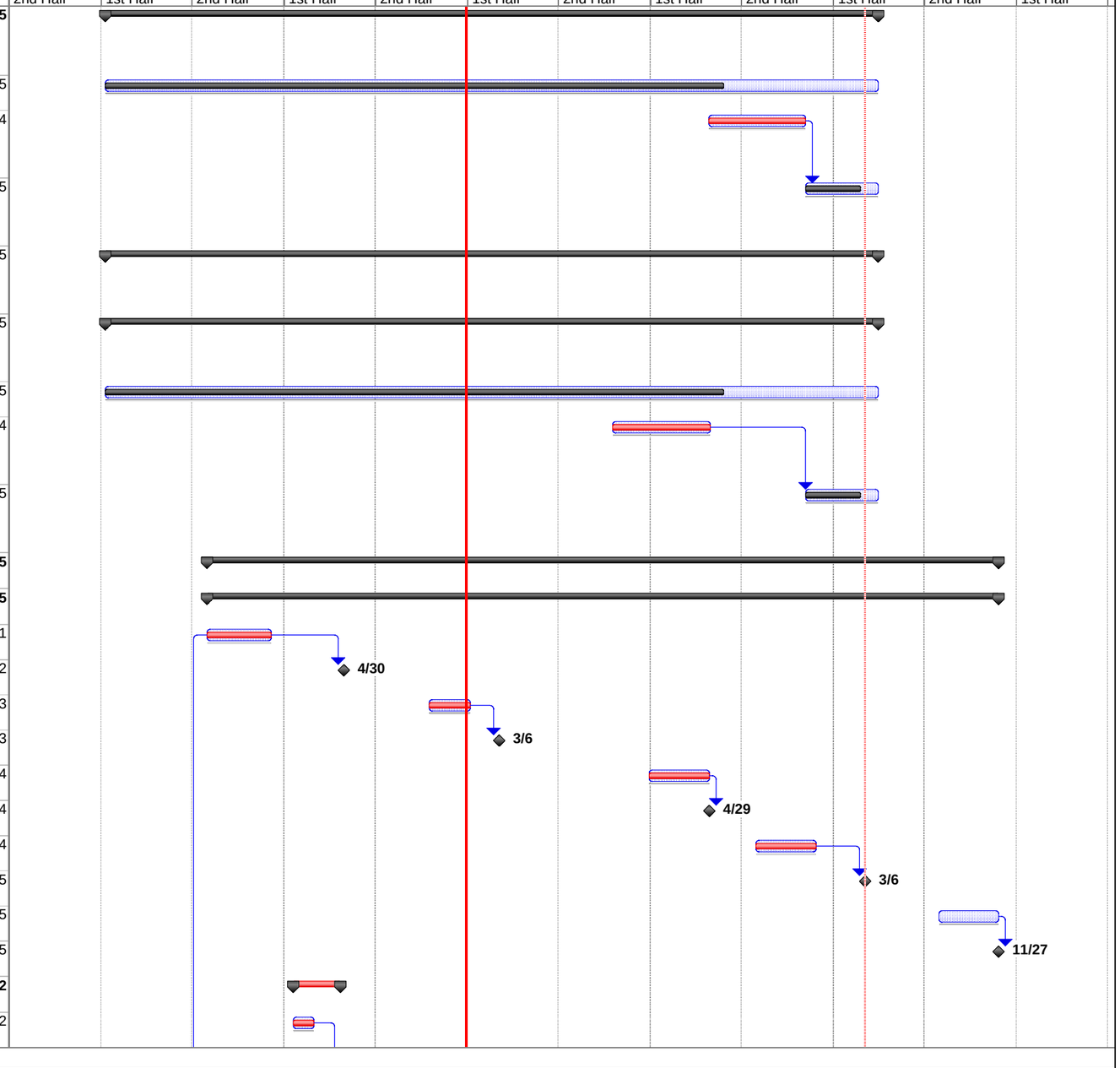
ID	Task Name	Duration	Start	Finish
107	**DP013 - Unrestricted Site Closure and LUC/IC Inspections until Closure Achieved**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**
108	LUC/IC Inspections and Reporting 2011-2015	1102 days	Mon 1/10/11	Tue 3/31/15
109	DP013 Prepare and Submit Closure Report-Addendum Report Submitted Per NYSDEC Request	139 days	Mon 4/28/14	Thu 11/6/14
110	DP013 - AFCEC & NYSDEC Review and Acceptance of Closure Report	103 days	Fri 11/7/14	Tue 3/31/15
111	**DP015 - Building 219 (Mod 2-Closure with No Restrictions) Closure Pending**	1102 days	Mon 1/10/11	Tue 3/31/15
112	**DP015 - Unrestricted Site Closure and LUC/IC Inspections until Closure Achieved**	1102 days	Mon 1/10/11	Tue 3/31/15
113	LUC/IC Inspections and Reporting 2011-2015	1102 days	Mon 1/10/11	Tue 3/31/15
114	DP015 Prepare and Submit Closure Report-Addendum Report Submitted Per NYSDEC Request	139 days	Fri 10/18/13	Wed 4/30/14
115	DP015 - AFCEC & NYSDEC Review and Acceptance of Closure Report	103 days	Fri 11/7/14	Tue 3/31/15
116	**SS017 - Lot 69**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**
117	**SS017 - LUCIC Inspection**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**
118	SS017 - LUCIC Inspection Report - Year 1-2011	128 edays	Mon 8/1/11	Wed 12/7/11
119	SS017 - Acceptance of LUCIC Inspection Report - Year 1	0 days	Mon 4/30/12	Mon 4/30/12
120	SS017 - LUCIC Inspection Report - Year 2-2012	82 edays	Wed 10/17/12	Mon 1/7/13
121	SS017 - Acceptance of LUCIC Inspection Report - Year 2	0 days	Wed 3/6/13	Wed 3/6/13
122	SS017 - LUCIC Inspection Report - Year 3-2013	120 edays	Mon 12/30/13	Tue 4/29/14
123	SS017 - Acceptance of LUCIC Inspection Report	0 days	Tue 4/29/14	Tue 4/29/14
124	SS017 - LUCIC Inspection Report - Year 4-2014	120 edays	Thu 7/31/14	Fri 11/28/14
125	SS017 - Acceptance of LUCIC Inspection Report - Year 4	0 days	Fri 3/6/15	Fri 3/6/15
126	SS017 - LUCIC Inspection Report - Year 5-2015	119 edays	Fri 7/31/15	Fri 11/27/15
127	SS017 - Acceptance of LUCIC Inspection Report - Year 5	0 days	Fri 11/27/15	Fri 11/27/15
128	**SS017 - Removal of Groundwater LUCIC**	**66 days**	**Fri 1/20/12**	**Mon 4/23/12**
129	SS017 - Groundwater LUCIC Removal Documentation Report	41 edays	Fri 1/20/12	Thu 3/1/12



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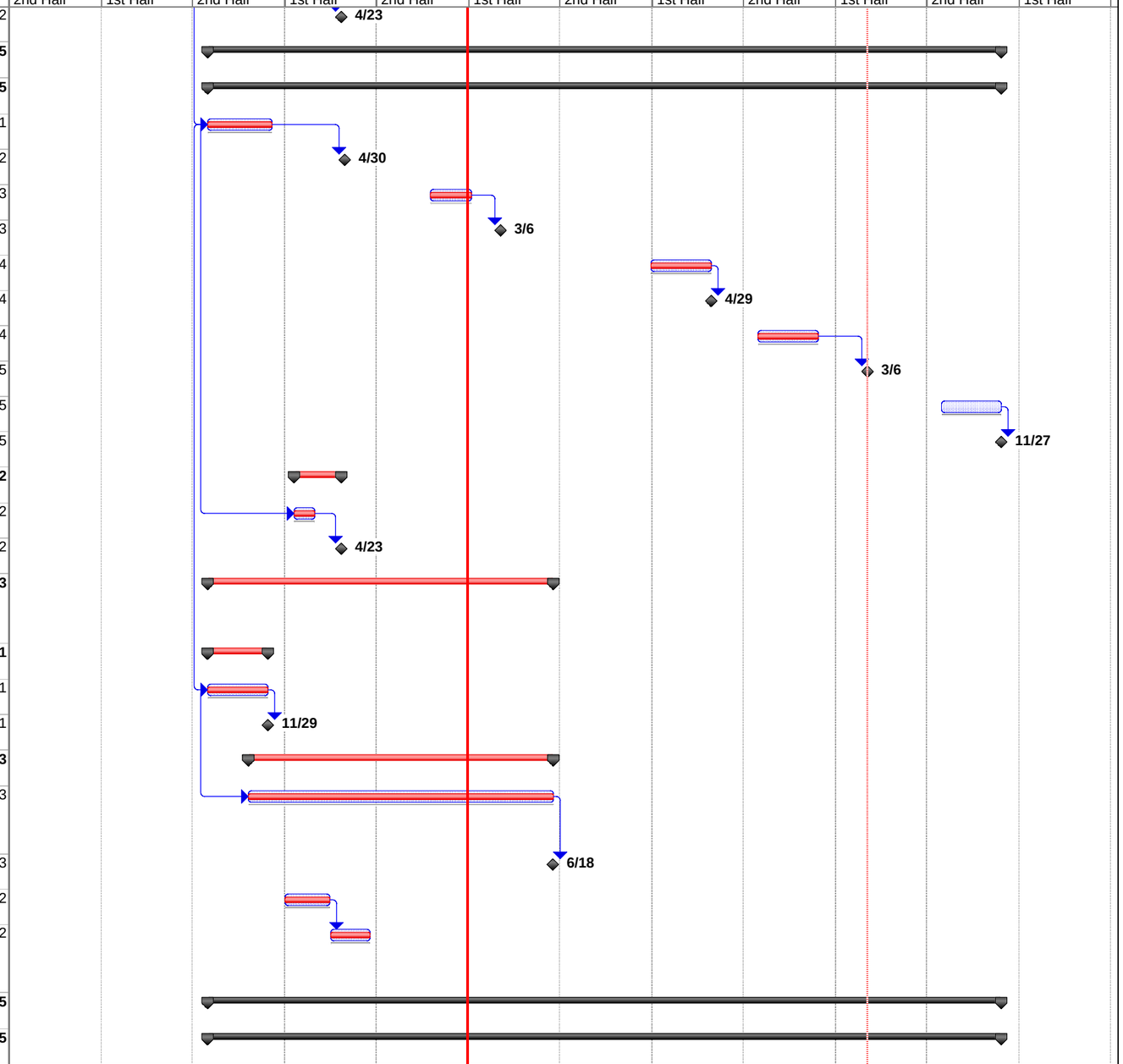
ID	Task Name	Duration	Start	Finish
130	SS017 - Acceptance of LUCIC Removal	0 days	Mon 4/23/12	Mon 4/23/12
131	**DP022 - Building 222**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**
132	**DP022 - LUCIC Inspection**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**
133	DP022 - LUCIC Inspection Report - Year 1-2011	128 edays	Mon 8/1/11	Wed 12/7/11
134	DP022 - Acceptance of LUCIC Inspection Report - Year 1	0 days	Mon 4/30/12	Mon 4/30/12
135	DP022 - LUCIC Inspection Report - Year 2-2012	82 edays	Wed 10/17/12	Mon 1/7/13
136	DP022 - Acceptance of LUCIC Inspection Report - Year 2	0 days	Wed 3/6/13	Wed 3/6/13
137	DP022 - LUCIC Inspection Report - Year 3-2013	120 edays	Mon 12/30/13	Tue 4/29/14
138	DP022 - Acceptance of LUCIC Inspection Report - Year 3	0 days	Tue 4/29/14	Tue 4/29/14
139	DP022 - LUCIC Inspection Report - Year 4-2014	120 edays	Thu 7/31/14	Fri 11/28/14
140	DP022 - Acceptance of LUCIC Inspection Report - Year 4	0 days	Fri 3/6/15	Fri 3/6/15
141	DP022 - LUCIC Inspection Report - Year 5-2015	119 edays	Fri 7/31/15	Fri 11/27/15
142	DP022 - Acceptance of LUCIC Inspection Report - Year 5	0 days	Fri 11/27/15	Fri 11/27/15
143	**DP022 - Removal of Groundwater LUCIC**	**66 days**	**Fri 1/20/12**	**Mon 4/23/12**
144	DP022 - Groundwater LUCIC Removal Documentation Report	41 edays	Fri 1/20/12	Thu 3/1/12
145	DP022 - Acceptance of LUCIC Removal	0 days	Mon 4/23/12	Mon 4/23/12
146	**SS023 - Building 20 (Closure with no Restrictions) Closure Approval 6/18/13**	**492 days**	**Mon 8/1/11**	**Tue 6/18/13**
147	**SS023 - LUCIC Inspection**	**86 days**	**Mon 8/1/11**	**Tue 11/29/11**
148	SS023 - LUCIC Inspection Report - Year 1	120 edays	Mon 8/1/11	Tue 11/29/11
149	SS023 - Acceptance of LUCIC Inspection Report - Year 1	0 days	Tue 11/29/11	Tue 11/29/11
150	**SS023 - Removal of LUCIC**	**433 days**	**Thu 10/20/11**	**Tue 6/18/13**
151	SS023 - Soil and Groundwater Sampling/Reporting/Closure Report	607 edays	Thu 10/20/11	Tue 6/18/13
152	SS023 - Acceptance of LUCIC Removal	0 days	Tue 6/18/13	Tue 6/18/13
153	SS023 Prepare and Submit Closure Report	65 days	Mon 1/2/12	Fri 3/30/12
154	SS023 - AFCEC & NYSDEC Review and Acceptance of Closure Report	56 days	Mon 4/2/12	Mon 6/18/12
155	**SS025 - Site T-9**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**
156	**SS025 - LUCIC Inspection**	**1129 days**	**Mon 8/1/11**	**Fri 11/27/15**



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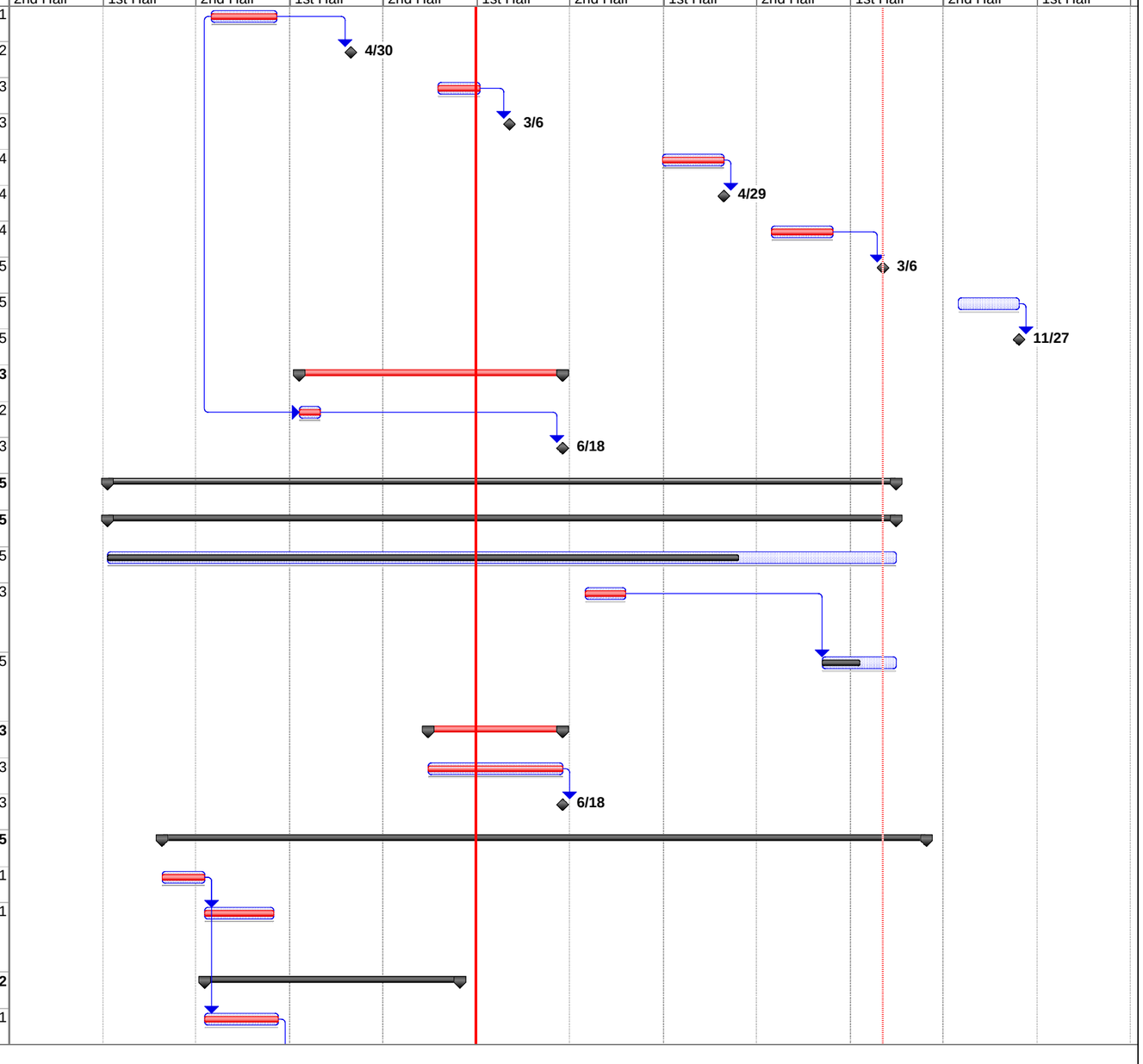
ID	Task Name	Duration	Start	Finish
157	SS025 - LUCIC Inspection Report - Year 1	128 edays	Mon 8/1/11	Wed 12/7/11
158	SS025 - Acceptance of LUCIC Inspection Report - Year 1	0 days	Mon 4/30/12	Mon 4/30/12
159	SS025 - LUCIC Inspection Report - Year 2	82 edays	Wed 10/17/12	Mon 1/7/13
160	SS025 - Acceptance of LUCIC Inspection Report - Year 2	0 days	Wed 3/6/13	Wed 3/6/13
161	SS025 - LUCIC Inspection Report - Year 3	120 edays	Mon 12/30/13	Tue 4/29/14
162	SS025 - Acceptance of LUCIC Inspection Report - Year 3	0 days	Tue 4/29/14	Tue 4/29/14
163	SS025 - LUCIC Inspection Report - Year 4	120 edays	Thu 7/31/14	Fri 11/28/14
164	SS025 - Acceptance of LUCIC Inspection Report - Year 4	0 days	Fri 3/6/15	Fri 3/6/15
165	SS025 - LUCIC Inspection Report - Year 5	119 edays	Fri 7/31/15	Fri 11/27/15
166	SS025 - Acceptance of LUCIC Inspection Report - Year 5	0 days	Fri 11/27/15	Fri 11/27/15
167	**SS025 - Removal of Groundwater LUCIC**	**367 days**	**Fri 1/20/12**	**Tue 6/18/13**
168	SS025 - Groundwater LUCIC Removal Documentation Report	41 edays	Fri 1/20/12	Thu 3/1/12
169	SS025 - Acceptance of LUCIC Removal	0 days	Tue 6/18/13	Tue 6/18/13
170	**SD050 - Building 214 (Mod 2-Closure with No Restrictions)**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**
171	**SD050 - LUCIC Inspection**	**1102 days**	**Mon 1/10/11**	**Tue 3/31/15**
172	LUC/IC Inspections and Reporting 2011-2015	1102 days	Mon 1/10/11	Tue 3/31/15
173	DP015 Prepare and Submit Closure Report-Addendum Report Submitted Per NYSDEC Request	57 days	Thu 8/1/13	Fri 10/18/13
174	DP015 - AFCEC & NYSDEC Review and Acceptance of Closure Report	103 days	Fri 11/7/14	Tue 3/31/15
175	**SD050 - Removal of Groundwater LUCIC**	**187 days**	**Fri 9/28/12**	**Tue 6/18/13**
176	SD050 - Groundwater LUCIC Removal Documentation Report	263 edays	Fri 9/28/12	Tue 6/18/13
177	SD050 - Acceptance of LUCIC Removal	0 days	Tue 6/18/13	Tue 6/18/13
178	**SD041 - Nose Doc #1 (Closure Unrestricted Reuse)**	**1068 days**	**Wed 4/27/11**	**Fri 5/29/15**
179	SD041 -Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
180	SD041 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
181	**SD041 - Conduct Monitoring, Operations & Maintenance**	**357 days**	**Tue 7/19/11**	**Wed 11/28/12**
182	SD041 - Conduct Monitoring, Prep and Submit CY11 Q2 LTO/LTM	104 days	Tue 7/19/11	Fri 12/9/11



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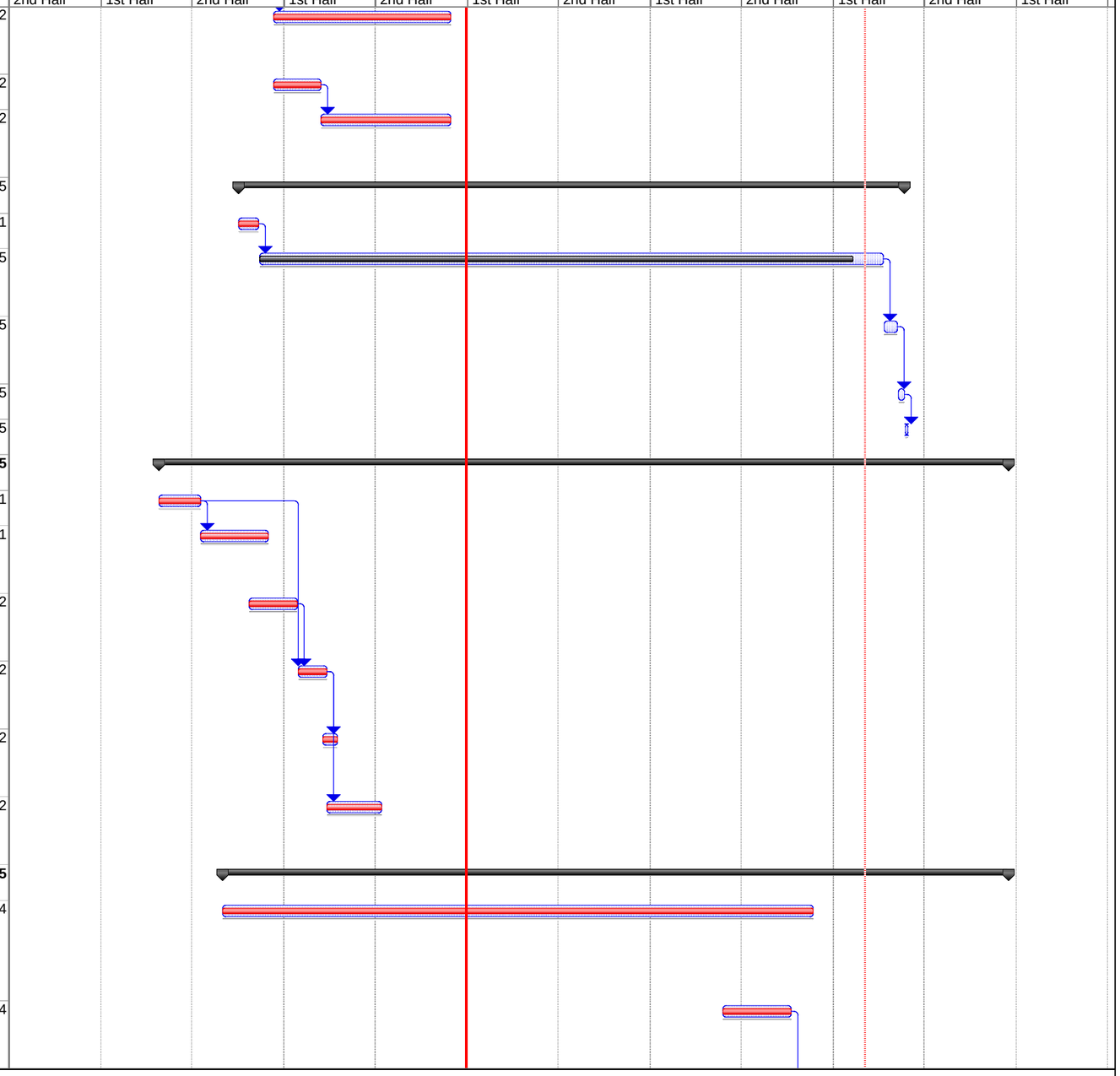
ID	Task Name	Duration	Start	Finish
183	SD041 - AFCEC & NYSDEC Review and Acceptance of CY11 Q2 LTO/LTM Report	253 days	Mon 12/12/11	Wed 11/28/12
184	SD041 - Conduct Monitoring, Prep and Submit CY11 Q3 LTO/LTM	68 days	Mon 12/12/11	Wed 3/14/12
185	SD041 - AFCEC & NYSDEC Review and Acceptance of CY11 Q3 LTO/LTM Report	185 days	Thu 3/15/12	Wed 11/28/12
186	**SD041 - Achieve Site Closure**	950 days	Mon 10/3/11	Fri 5/22/15
187	SD041 - Prepare and Submit Closure Report	30 days	Mon 10/3/11	Fri 11/11/11
188	SD041 - Prepare and Submit Closure Report Addendum Report required to address additional sampling request.	890 days	Mon 11/14/11	Fri 4/10/15
189	SD041 - AFCEC & NYSDEC Review and Acceptance of Closure Report	20 days	Mon 4/13/15	Fri 5/8/15
190	SD041 - NYSDEC Closure of Spill Number	10 days	Mon 5/11/15	Fri 5/22/15
191	SD041 - Wells Decommissioned	5 days	Mon 5/25/15	Fri 5/29/15
192	**SS054 - BLDG 781 Pumphouse (Optimized Exit Strategy)**	**1211 days**	**Wed 4/27/11**	**Wed 12/16/15**
193	SS054 - Design/Plan Remedy Optimization	59 days	Wed 4/27/11	Mon 7/18/11
194	SS054 - AFCEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
195	SS054 - Complete Supplemental Investigation, submit Investigation Report	70 days	Mon 10/24/11	Fri 1/27/12
196	SS054 - Implement Remedy Optimization Systems and Submit Report	41 days	Mon 1/30/12	Mon 3/26/12
197	SS054 - AFCEC & NYSDEC Review and Acceptance of Investigation Report	21 days	Mon 3/19/12	Mon 4/16/12
198	SS054 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	79 days	Tue 3/27/12	Fri 7/13/12
199	**SS054 - Conduct Monitoring, Operations & Maintenance**	**1120 days**	**Thu 9/1/11**	**Wed 12/16/15**
200	SS054 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports for 2011, CY2012, 2013 and Receive Regulatory Acceptance	842 days	Thu 9/1/11	Fri 11/21/14
201	SS054 - Conduct Monitoring, Prep and Submit CY14 Q1 LTO/LTM Report	98 days	Mon 5/26/14	Wed 10/8/14



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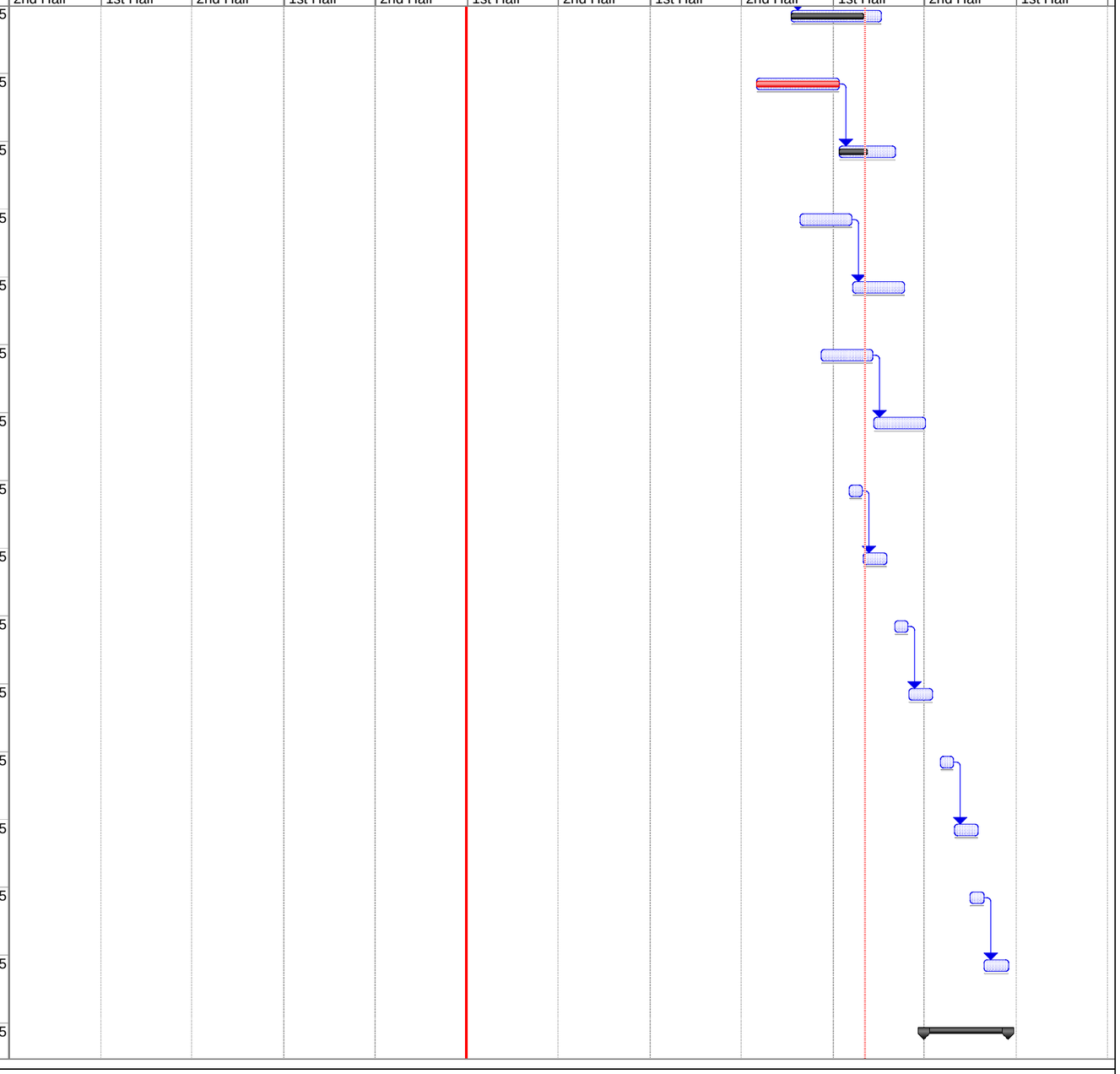
ID	Task Name	Duration	Start	Finish
202	SS054 - AFCEC & NYSDEC Review and Acceptance of CY14 Q1 LTO/LTM Report	128 days	Thu 10/9/14	Mon 4/6/15
203	SS054 - Conduct Monitoring, Prep and Submit CY14 Q2 LTO/LTM Report	117 days	Fri 8/1/14	Mon 1/12/15
204	SS054 - AFCEC & NYSDEC Review and Acceptance of CY14 Q2 LTO/LTM Report	80 days	Tue 1/13/15	Mon 5/4/15
205	SS054 - Conduct Monitoring, Prep and Submit CY14 Q3 LTO/LTM Report	75 days	Mon 10/27/14	Fri 2/6/15
206	SS054 - AFCEC & NYSDEC Review and Acceptance of CY14 Q3 LTO/LTM Report	75 days	Mon 2/9/15	Fri 5/22/15
207	SS054 - Conduct Monitoring, Prep and Submit CY14 Q4 LTO/LTM Report	75 days	Mon 12/8/14	Fri 3/20/15
208	SS054 - AFCEC & NYSDEC Review and Acceptance of CY14 Q4 LTO/LTM Report	75 days	Mon 3/23/15	Fri 7/3/15
209	SS054 - Conduct Monitoring, Prep and Submit CY15 Q1 LTO/LTM Report	20 days	Mon 2/2/15	Fri 2/27/15
210	SS054 - AFCEC & NYSDEC Review and Acceptance of CY15 Q1 LTO/LTM Report	35 days	Mon 3/2/15	Fri 4/17/15
211	SS054 - Conduct Monitoring, Prep and Submit CY15 Q2 LTO/LTM Report	20 days	Mon 5/4/15	Fri 5/29/15
212	SS054 - AFCEC & NYSDEC Review and Acceptance of CY15 Q2 LTO/LTM Report	35 days	Mon 6/1/15	Fri 7/17/15
213	SS054 - Conduct Monitoring, Prep and Submit CY15 Q3 LTO/LTM Report	20 days	Mon 8/3/15	Fri 8/28/15
214	SS054 - AFCEC & NYSDEC Review and Acceptance of CY15 Q3 LTO/LTM Report	35 days	Mon 8/31/15	Fri 10/16/15
215	SS054 - Conduct Monitoring, Prep and Submit CY15 Q4 LTO/LTM Report	20 days	Thu 10/1/15	Wed 10/28/15
216	SS054 - AFCEC & NYSDEC Review and Acceptance of CY15 Q4 LTO/LTM Report	35 days	Thu 10/29/15	Wed 12/16/15
217	**SS054 - Optimization Exit Strategy**	120 days	Wed 7/1/15	Tue 12/15/15



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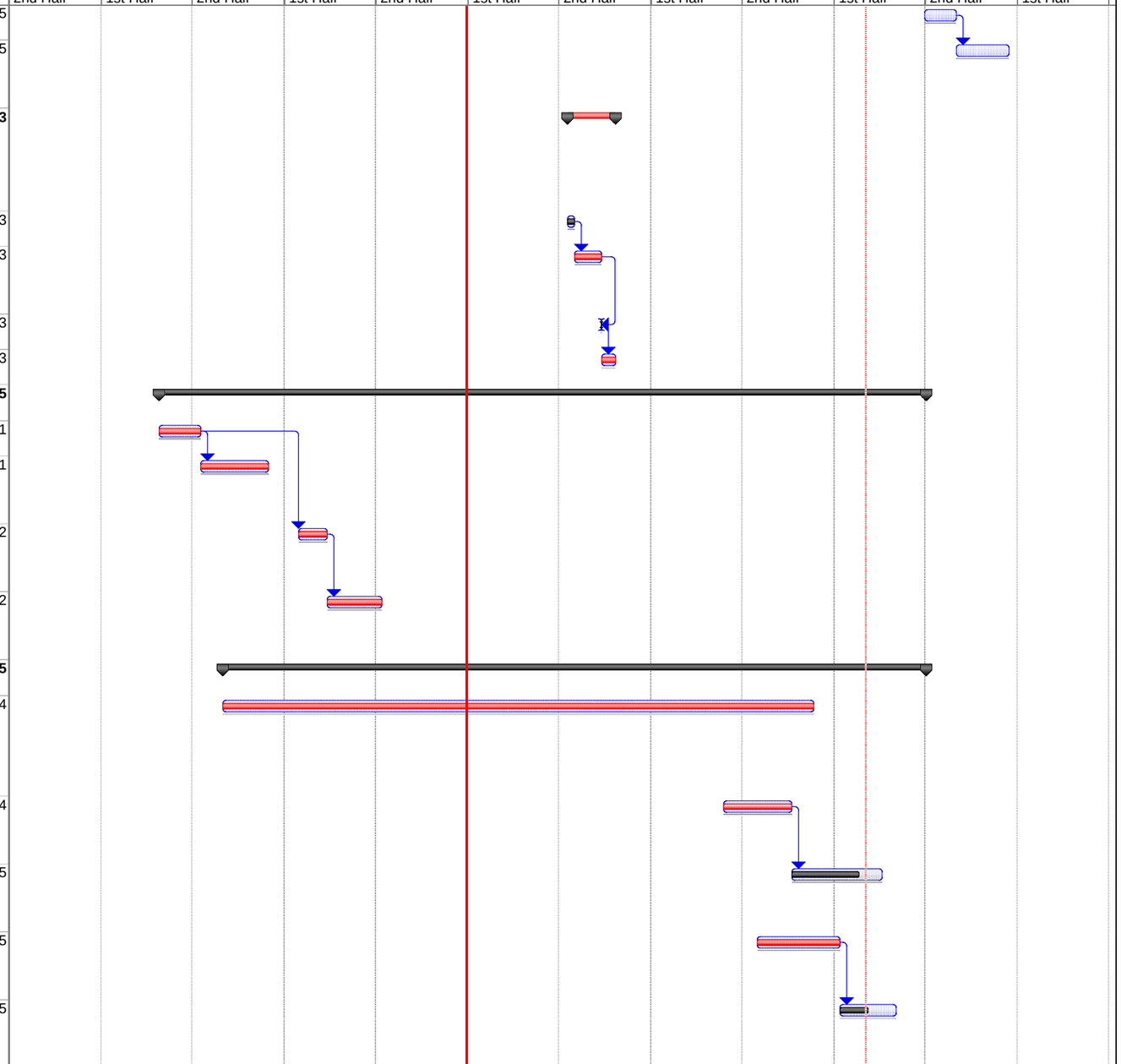
ID	Task Name	Duration	Start	Finish
218	SS054 - Prepare and Submit Optimized Exit Strategy Report	45 days	Wed 7/1/15	Tue 9/1/15
219	SS054 - AFCEC & NYSDEC Review and Acceptance of Optimized Exit Strategy Report	75 days	Wed 9/2/15	Tue 12/15/15
220	**SS020 - Tank Farms 1 & 3 (Closure Unrestricted Reuse) Revised approach to LTM Closure by 2015. Closure Approval 9/25/13.**	**68 days**	**Fri 7/19/13**	**Tue 10/22/13**
221	SS020 - Prepare and Submit Closure Report	10 days	Fri 7/19/13	Thu 8/1/13
222	SS020 - AFCEC & NYSDEC Review and Acceptance of Closure Report	38 days	Fri 8/2/13	Tue 9/24/13
223	SS020 - NYSDEC Closure of Spill Number	1 day	Tue 9/24/13	Tue 9/24/13
224	SS020 - Wells Decommissioned	20 days	Wed 9/25/13	Tue 10/22/13
225	**SS063 - Apron 1 (Closure Unrestricted Reuse)**	**1093 days**	**Wed 4/27/11**	**Fri 7/3/15**
226	SS063 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
227	SS063 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
228	SS063 - Implement Remedy Optimization Systems and Submit Report	41 days	Mon 1/30/12	Mon 3/26/12
229	SS063 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	79 days	Tue 3/27/12	Fri 7/13/12
230	**SS063 - Conduct Monitoring, Operations & Maintenance**	**1002 days**	**Thu 9/1/11**	**Fri 7/3/15**
231	SS063 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports for 2011, 2012, 2013 and Achieve AFCEC and Regulatory Acceptance	842 days	Thu 9/1/11	Fri 11/21/14
232	SS063 - Conduct Monitoring, Prep and Submit CY14 Q1 LTO/LTM Report	98 days	Mon 5/26/14	Wed 10/8/14
233	SS063 - AFCEC & NYSDEC Review and Acceptance of CY14 Q1 LTO/LTM Report	128 days	Thu 10/9/14	Mon 4/6/15
234	SS063 - Conduct Monitoring, Prep and Submit CY14 Q2 LTO/LTM Report	117 days	Fri 8/1/14	Mon 1/12/15
235	SS063 - AFCEC & NYSDEC Review and Acceptance of CY14 Q2 LTO/LTM Report	80 days	Tue 1/13/15	Mon 5/4/15



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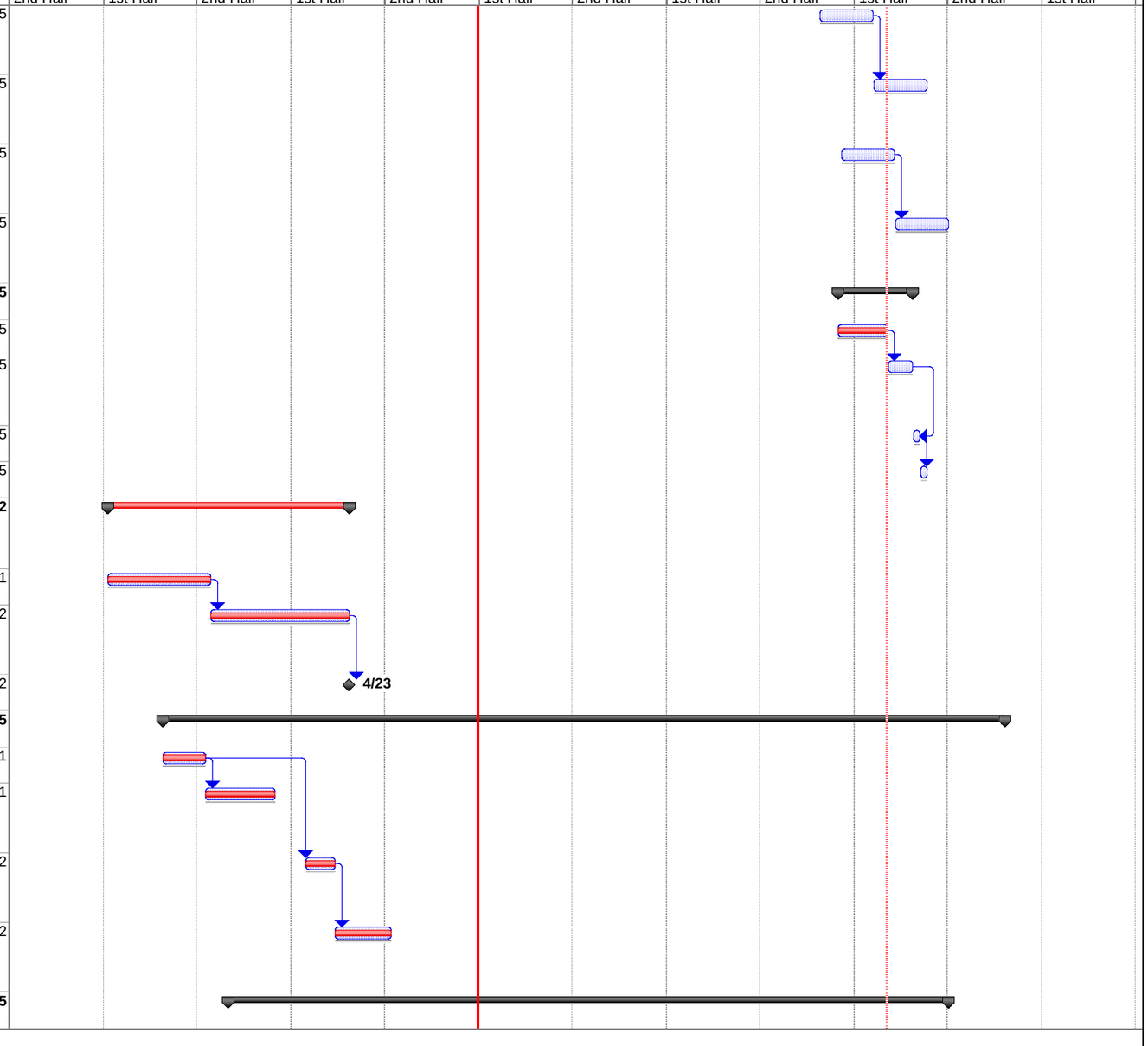
ID	Task Name	Duration	Start	Finish
236	SS063 - Conduct Monitoring, Prep and Submit CY14 Q3 LTO/LTM Report	75 days	Mon 10/27/14	Fri 2/6/15
237	SS063 - AFCEC & NYSDEC Review and Acceptance of CY14 Q3 LTO/LTM Report	75 days	Mon 2/9/15	Fri 5/22/15
238	SS063 - Conduct Monitoring, Prep and Submit CY14 Q4 LTO/LTM Report	75 days	Mon 12/8/14	Fri 3/20/15
239	SS063 - AFCEC & NYSDEC Review and Acceptance of CY14 Q4 LTO/LTM Report	75 days	Mon 3/23/15	Fri 7/3/15
240	**SS063 - Prepare and Submit Closure Report**	**105 days**	**Mon 12/1/14**	**Fri 4/24/15**
241	Prepare and Submit Draft Closure Report	70 days	Mon 12/1/14	Fri 3/6/15
242	SS063 - AFCEC & NYSDEC Review and Acceptance of Closure Report	35 days	Mon 3/9/15	Fri 4/24/15
243	SS063 - NYSDEC Closure of Spill Number	10 days	Mon 4/27/15	Fri 5/8/15
244	SS063 - Wells Decommissioned	10 days	Mon 5/11/15	Fri 5/22/15
245	**ST037 - Bldg 771, Pumphouse 5 (Closure Unrestricted Use) Closure Approval 4/23/12**	**336 days**	**Mon 1/10/11**	**Mon 4/23/12**
246	ST037 - Prepare and Submit Closure Report	144 days	Mon 1/10/11	Thu 7/28/11
247	ST037 - AFCEC & NYSDEC Review and Acceptance of Closure Report	192 days	Fri 7/29/11	Mon 4/23/12
248	ST037 - NYSDEC Closure of Spill Number	0 days	Mon 4/23/12	Mon 4/23/12
249	**SS064 - Apron 2 (Closure Unrestricted Reuse)**	**1171 days**	**Wed 4/27/11**	**Wed 10/21/15**
250	SS064 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
251	SS064 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
252	SS064 - Implement Remedy Optimization Systems and Submit Report	41 days	Mon 1/30/12	Mon 3/26/12
253	SS064 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	79 days	Tue 3/27/12	Fri 7/13/12
254	**SS064 - Conduct Monitoring, Operations & Maintenance**	**1002 days**	**Thu 9/1/11**	**Fri 7/3/15**



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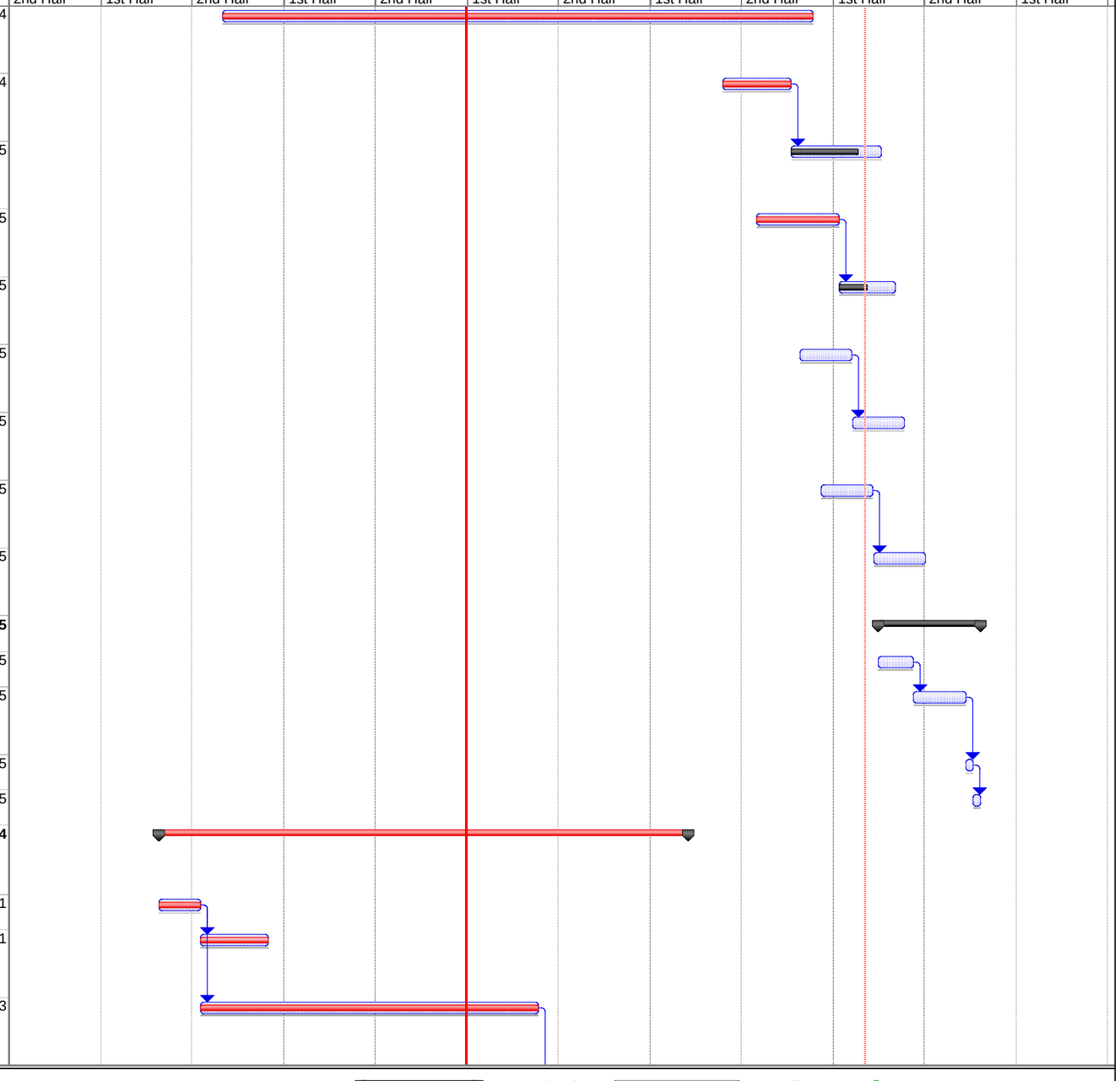
255	SS064 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports for 2011, 2012, 2013 and Achieve AFCEC and Regulatory Acceptance	842 days	Thu 9/1/11	Fri 11/21/14
256	SS064 - Conduct Monitoring, Prep and Submit CY14 Q1 LTO/LTM Report	98 days	Mon 5/26/14	Wed 10/8/14
257	SS064 - AFCEC & NYSDEC Review and Acceptance of CY14 Q1 LTO/LTM Report	128 days	Thu 10/9/14	Mon 4/6/15
258	SS064 - Conduct Monitoring, Prep and Submit CY14 Q2 LTO/LTM Report	117 days	Fri 8/1/14	Mon 1/12/15
259	SS064 - AFCEC & NYSDEC Review and Acceptance of CY14 Q2 LTO/LTM Report	80 days	Tue 1/13/15	Mon 5/4/15
260	SS064 - Conduct Monitoring, Prep and Submit CY14 Q3 LTO/LTM Report	75 days	Mon 10/27/14	Fri 2/6/15
261	SS064 - AFCEC & NYSDEC Review and Acceptance of CY14 Q3 LTO/LTM Report	75 days	Mon 2/9/15	Fri 5/22/15
262	SS064 - Conduct Monitoring, Prep and Submit CY14 Q4 LTO/LTM Report	75 days	Mon 12/8/14	Fri 3/20/15
263	SS064 - AFCEC & NYSDEC Review and Acceptance of CY14 Q4 LTO/LTM Report	75 days	Mon 3/23/15	Fri 7/3/15
264	**SS064 - Closure Report**	**146 days**	**Wed 4/1/15**	**Wed 10/21/15**
265	SS064 - Prepare and Submit Closure Report	50 days	Wed 4/1/15	Tue 6/9/15
266	SS064 - AFCEC & NYSDEC Review and Acceptance of Closure Report	75 days	Wed 6/10/15	Tue 9/22/15
267	SS064 - NYSDEC Closure of Spill Number	10 days	Wed 9/23/15	Tue 10/6/15
268	SS064 - Wells Decommissioned	11 days	Wed 10/7/15	Wed 10/21/15
269	**SS065 - BLDG 15 (Closure Unrestricted Reuse) Closure Approval 1/8/14**	**754 days**	**Wed 4/27/11**	**Mon 3/17/14**
270	SS065 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
271	SS065 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
272	SS065 - Implement Remedy Optimization Systems and Submit Report	482 days	Tue 7/19/11	Wed 5/22/13



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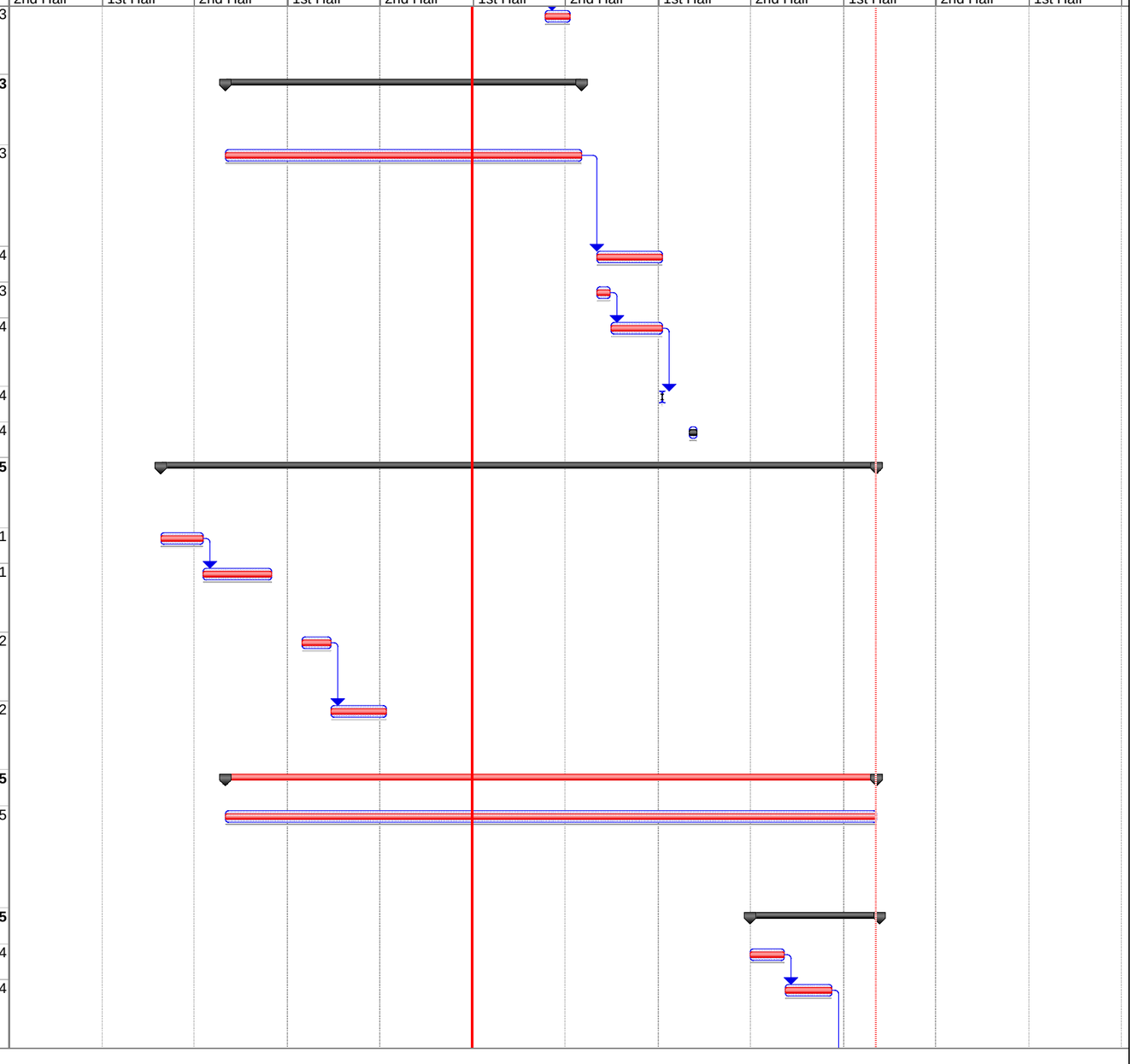
273	SS065 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	35 days	Thu 5/23/13	Wed 7/10/13
274	**SS065 - Conduct Monitoring, Operations & Maintenance**	**502 days**	**Thu 9/1/11**	**Fri 8/2/13**
275	SS065 - Conduct Monitoring, Prep and Submit QuarterlyLTO/LTM Reports 2011, 2012 and Achieve AFCEC and NYSDEC Approval	502 days	Thu 9/1/11	Fri 8/2/13
276	SS065 - Achieve Site Closure	93 days	Mon 9/2/13	Wed 1/8/14
277	SS065 - Prepare and Submit Closure Report	20 days	Mon 9/2/13	Fri 9/27/13
278	SS065 - AFCEC & NYSDEC Review and Acceptance of Closure Report	73 days	Mon 9/30/13	Wed 1/8/14
279	SS065 - NYSDEC Closure of Spill Number	1 day	Wed 1/8/14	Wed 1/8/14
280	SS065 - Wells Decommissioned	11 days	Mon 3/3/14	Mon 3/17/14
281	**SS066 - BLDG 786 (Closure Unrestricted Reuse) Closure Approval 12/8/14**	**1008 days**	**Wed 4/27/11**	**Fri 3/6/15**
282	SS066 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
283	SS066 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
284	SS066 - Implement Remedy Optimization Systems and Submit Report	41 days	Mon 1/30/12	Mon 3/26/12
285	SS066 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	79 days	Tue 3/27/12	Fri 7/13/12
286	**SS066 - Conduct Monitoring, Operations & Maintenance**	**917 days**	**Thu 9/1/11**	**Fri 3/6/15**
287	SS065 - Conduct Monitoring, Prep and Submit QuarterlyLTO/LTM Reports 2011, 2012, 2013,2014 QTR 1 and Achieve AFCEC and NYSDEC Approval	917 days	Thu 9/1/11	Fri 3/6/15
288	**SS066 - Achieve Site Closure**	**183 days**	**Tue 7/1/14**	**Thu 3/12/15**
289	SS066 - Prepare and Submit Closure Report	49 days	Tue 7/1/14	Fri 9/5/14
290	SS066 - AFCEC & NYSDEC Review and Acceptance of Closure Report	66 days	Mon 9/8/14	Mon 12/8/14



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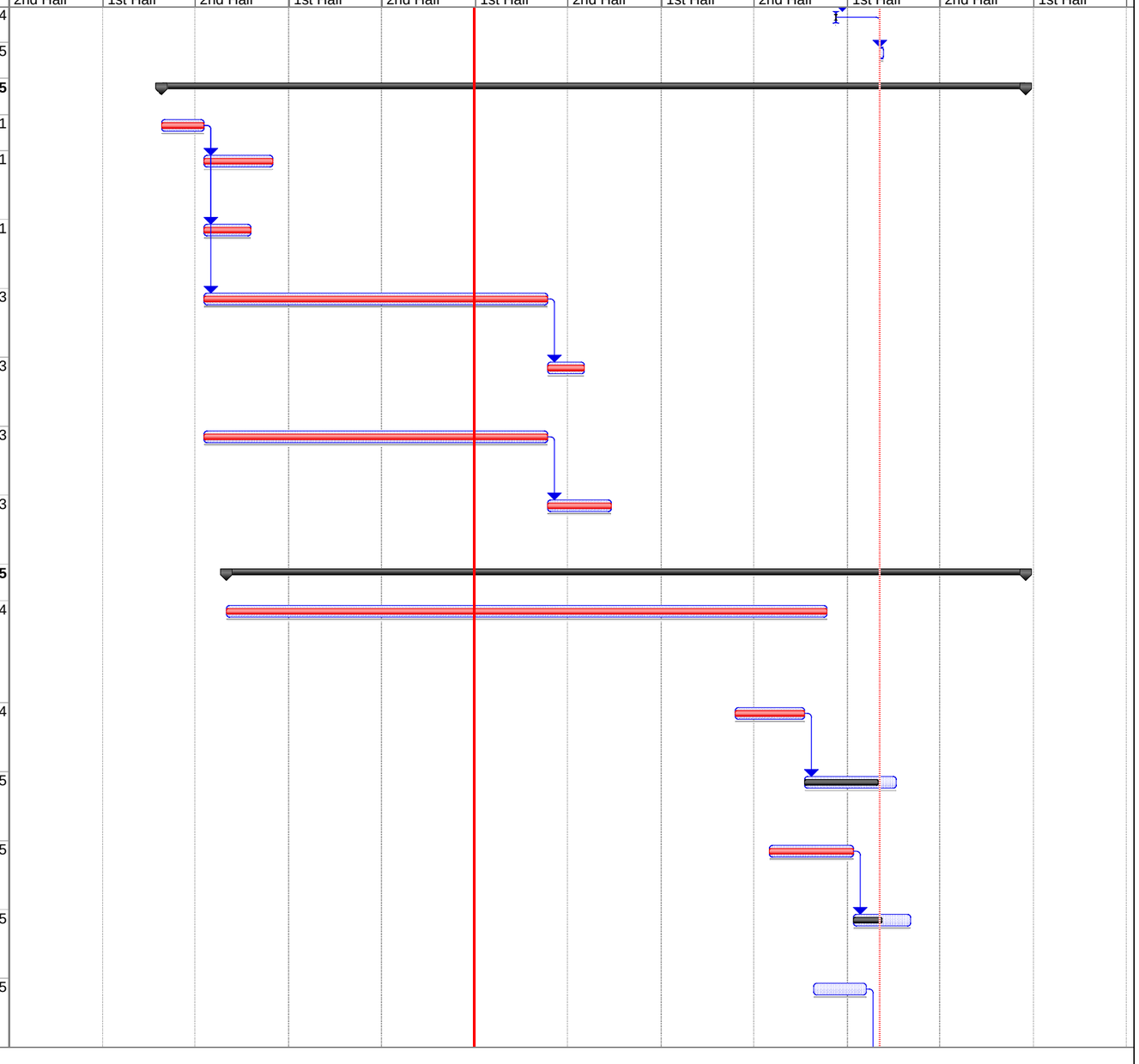
291	SS066 - NYSDEC Closure of Spill Number	1 day	Tue 12/9/14	Tue 12/9/14
292	SS066 - Wells Decommissioned	5 days	Fri 3/6/15	Thu 3/12/15
293	**SS067 - BLDG 789 (Optimized Exit Strategy)**	**1211 days**	**Wed 4/27/11**	**Wed 12/16/15**
294	SS067 - Design/Plan Remedy Optimation	59 days	Wed 4/27/11	Mon 7/18/11
295	SS067 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
296	SS067 - Complete Supplemental Investigation, Submit Investigation Report	66 days	Tue 7/19/11	Tue 10/18/11
297	SS067 - Implement Remedy Optimization Systems and Submit Report	482 days	Tue 7/19/11	Wed 5/22/13
298	SS067 - AFCEC & NYSDEC Review and Acceptance of Investigation Report	52 days	Thu 5/23/13	Fri 8/2/13
299	SS067 - Implement Remedy Optimization Systems and Submit Report	482 days	Tue 7/19/11	Wed 5/22/13
300	SS067 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	89 days	Thu 5/23/13	Tue 9/24/13
301	**SS067 - Conduct Monitoring, Operations & Maintenance**	**1120 days**	**Thu 9/1/11**	**Wed 12/16/15**
302	SS067 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports 2011 Q2, 2012, 2013 and Achieve AFCEC and NYSDEC Approval.	842 days	Thu 9/1/11	Fri 11/21/14
303	SS067 - Conduct Monitoring, Prep and Submit CY14 Q1 LTO/LTM Report	98 days	Mon 5/26/14	Wed 10/8/14
304	SS067 - AFCEC & NYSDEC Review and Acceptance of CY14 Q1 LTO/LTM Report	128 days	Thu 10/9/14	Mon 4/6/15
305	SS067 - Conduct Monitoring, Prep and Submit CY14 Q2 LTO/LTM Report	117 days	Fri 8/1/14	Mon 1/12/15
306	SS067 - AFCEC & NYSDEC Review and Acceptance of CY14 Q2 LTO/LTM Report	80 days	Tue 1/13/15	Mon 5/4/15
307	SS067 - Conduct Monitoring, Prep and Submit CY14 Q3 LTO/LTM Report	75 days	Mon 10/27/14	Fri 2/6/15



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308	SS067 - AFCEC & NYSDEC Review and Acceptance of CY14 Q3 LTO/LTM Report	75 days	Mon 2/9/15	Fri 5/22/15
309	SS067 - Conduct Monitoring, Prep and Submit CY14 Q4 LTO/LTM Report	75 days	Mon 12/8/14	Fri 3/20/15
310	SS067 - AFCEC & NYSDEC Review and Acceptance of CY14 Q4 LTO/LTM Report	75 days	Mon 3/23/15	Fri 7/3/15
311	SS067 - Conduct Monitoring, Prep and Submit CY15 Q1 LTO/LTM Report	20 days	Mon 2/2/15	Fri 2/27/15
312	SS067 - AFCEC & NYSDEC Review and Acceptance of CY15 Q1 LTO/LTM Report	35 days	Mon 3/2/15	Fri 4/17/15
313	SS067 - Conduct Monitoring, Prep and Submit CY15 Q2 LTO/LTM Report	20 days	Mon 5/4/15	Fri 5/29/15
314	SS067 - AFCEC & NYSDEC Review and Acceptance of CY15 Q2 LTO/LTM Report	35 days	Mon 6/1/15	Fri 7/17/15
315	SS067 - Conduct Monitoring, Prep and Submit CY15 Q3 LTO/LTM Report	20 days	Mon 8/3/15	Fri 8/28/15
316	SS067 - AFCEC & NYSDEC Review and Acceptance of CY15 Q3 LTO/LTM Report	35 days	Mon 8/31/15	Fri 10/16/15
317	SS067 - Conduct Monitoring, Prep and Submit CY15 Q4 LTO/LTM Report	20 days	Thu 10/1/15	Wed 10/28/15
318	SS067 - AFCEC & NYSDEC Review and Acceptance of CY15 Q4 LTO/LTM Report	35 days	Thu 10/29/15	Wed 12/16/15
319	**SS067 - Optimization Exit Strategy**	120 days	Wed 7/1/15	Tue 12/15/15
320	SS067 - Prepare and Submit Optimized Exit Strategy Report	45 days	Wed 7/1/15	Tue 9/1/15
321	SS067 - AFCEC & NYSDEC Review and Acceptance of Optimized Exit Strategy Report	75 days	Wed 9/2/15	Tue 12/15/15
322	**SS068 - BLDG 7001 (Closure Unrestricted Reuse) Closure Approval 12/8/14.**	**1033 days**	**Wed 4/27/11**	**Fri 4/10/15**
323	SS068 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11

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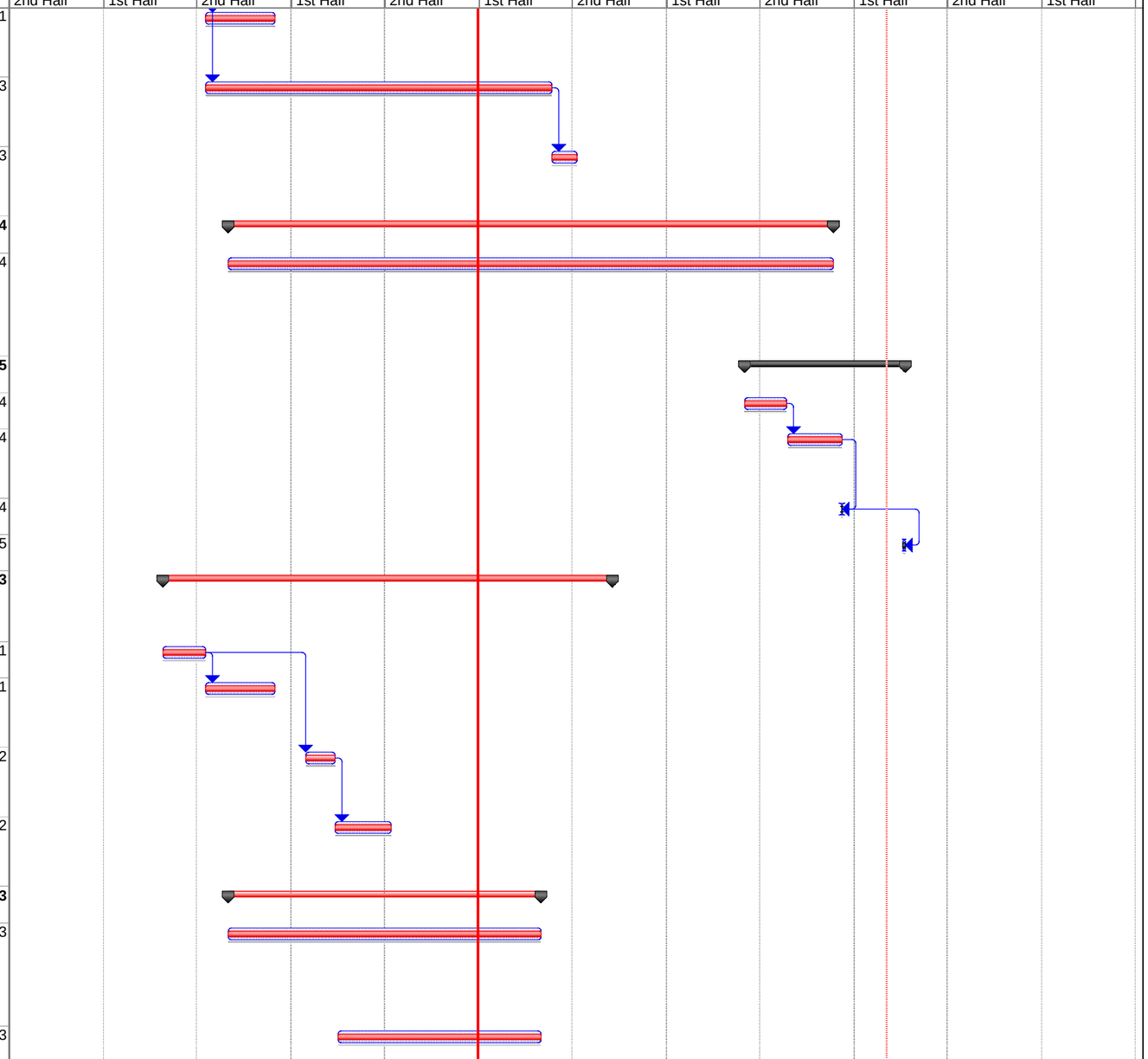
324	SS068 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
325	SS068 - Implement Remedy Optimization Systems and Submit Report	482 days	Tue 7/19/11	Wed 5/22/13
326	SS068 - AFCEC& NYSDEC Review and Acceptance of Optimization System and Report	35 days	Thu 5/23/13	Wed 7/10/13
327	**SS068 - Conduct Monitoring, Operations & Maintenance**	**842 days**	**Thu 9/1/11**	**Fri 11/21/14**
328	SS068 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports 2011, 2012, 2013 and 2014. Achieve AFCEC and NYSDEC Approval.	842 days	Thu 9/1/11	Fri 11/21/14
329	**SS068 - Achieve Site Closure**	**225 days**	**Mon 6/2/14**	**Fri 4/10/15**
330	SS068 - Prepare and Submit Closure Report	60 days	Mon 6/2/14	Fri 8/22/14
331	SS068 - AFCEC & NYSDEC Review and Acceptance of Closure Report	76 days	Mon 8/25/14	Mon 12/8/14
332	SS068 - NYSDEC Closure of Spill Number	1 day	Mon 12/8/14	Mon 12/8/14
333	SS068 - Wells Decommissioned	5 days	Mon 4/6/15	Fri 4/10/15
334	**SS069 - Bulk Fuel Storage Area (Closure Unrestricted Reuse) Closure Approval 5/1/13**	**625 days**	**Wed 4/27/11**	**Tue 9/17/13**
335	SS069 - Prepare and Submit Design/plan remedy optimization	59 days	Wed 4/27/11	Mon 7/18/11
336	SS069 - AFCEC & NYSDEC Review and Acceptance of Design/Plan Remedy Optimization	97 days	Tue 7/19/11	Wed 11/30/11
337	SS069 - Implement Remedy Optimization Systems and Submit Report	41 days	Mon 1/30/12	Mon 3/26/12
338	SS069 - AFCEC & NYSDEC Review and Acceptance of Optimization System and Report	79 days	Tue 3/27/12	Fri 7/13/12
339	**SS069 - Conduct Monitoring, Operations & Maintenance**	**435 days**	**Thu 9/1/11**	**Wed 5/1/13**
340	SS068 - Conduct Monitoring, Prep and Submit Quarterly LTO/LTM Reports 2011, 2012, and 2013. Achieve AFCEC and NYSDEC Approval.	435 days	Thu 9/1/11	Wed 5/1/13
341	**SS069 - Achieve Site Closure**	283 days	Mon 4/2/12	Wed 5/1/13



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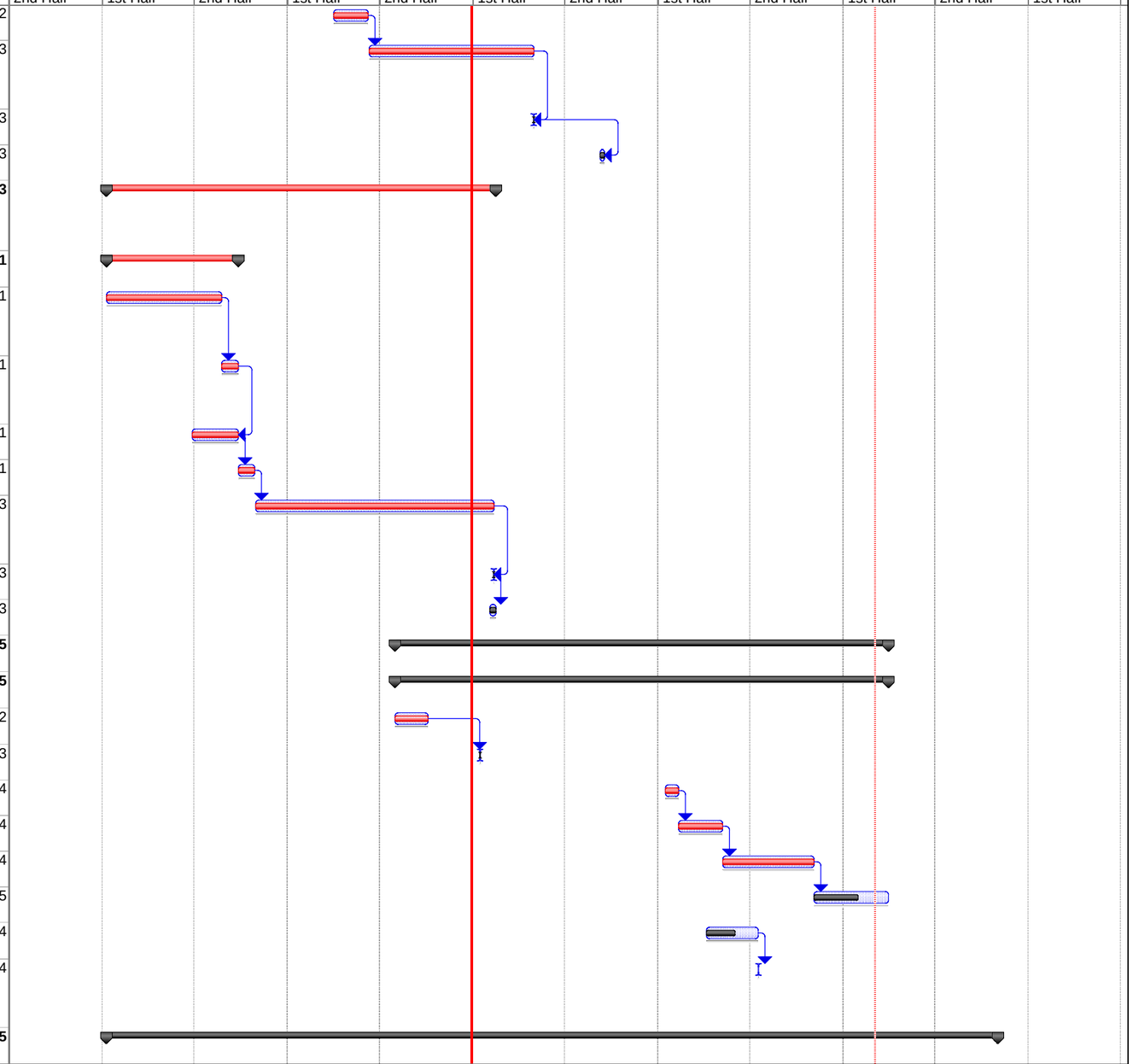
ID	Task Name	Duration	Start	Finish
342	SS069 - Prepare and Submit Closure Report	50 days	Mon 4/2/12	Fri 6/8/12
343	SS069 - AFCEC & NYSDEC Review and Acceptance of Closure Report	233 days	Mon 6/11/12	Wed 5/1/13
344	SS069 - NYSDEC Closure of Spill Number	1 day	Wed 5/1/13	Wed 5/1/13
345	SS069 - Wells Decommissioned	7 days	Mon 9/9/13	Tue 9/17/13
346	**SS070 - Building 150 (Closure Unrestricted Use) Closure Approval 2/11/13**	**550 days**	**Mon 1/10/11**	**Fri 2/15/13**
347	**SS070 - Conduct Monitoring**	**186 days**	**Mon 1/10/11**	**Mon 9/26/11**
348	SS070 - Conduct Monitoring, Prep and Submit CY11 LTM Report	163 days	Mon 1/10/11	Wed 8/24/11
349	SS070 - AFCEC & NYSDEC Review and Acceptance of CY11 LTM Report	23 days	Thu 8/25/11	Mon 9/26/11
350	SS070 - Achieve Site Closure	65 days	Tue 6/28/11	Mon 9/26/11
351	SS070 - Prepare and Submit Closure Report	24 days	Tue 9/27/11	Fri 10/28/11
352	SS070 - AFCEC & NYSDEC Review and Acceptance of Closure Report	336 days	Mon 10/31/11	Mon 2/11/13
353	SS070 - NYSDEC Closure of Spill Number	1 day	Mon 2/11/13	Mon 2/11/13
354	SS070 - Wells Decommissioned	10 days	Mon 2/4/13	Fri 2/15/13
355	**Unknown Sites**	**695 days**	**Wed 8/1/12**	**Tue 3/31/15**
356	**Investigate 10 Unknown Sites**	**695 days**	**Wed 8/1/12**	**Tue 3/31/15**
357	**Investigation Report - Site 1: AOI-474**	65 edays	Wed 8/1/12	Fri 10/5/12
358	Acceptance of Investigation Report - Site 1:AOI 474	1 day	Tue 1/15/13	Tue 1/15/13
359	Draft Site Closure Report	18 days	Thu 1/16/14	Mon 2/10/14
360	NYSDEC Review (Request for additional samples)	63 days	Tue 2/11/14	Thu 5/8/14
361	Final Closure Report (Closure Pending)	128 days	Fri 5/9/14	Tue 11/4/14
362	NYSDEC & EPA Review and Acceptance of Closure Report	105 days	Wed 11/5/14	Tue 3/31/15
363	**Investigation Report - Site 2: Building 785 Pipeline**	74 days	Mon 4/7/14	Thu 7/17/14
364	Acceptance of Investigation Report - Site 2: Building 785 Pipeline	1 day	Fri 7/18/14	Fri 7/18/14
365	**Five-Year Review**	**1256 days**	**Mon 1/10/11**	**Mon 11/2/15**



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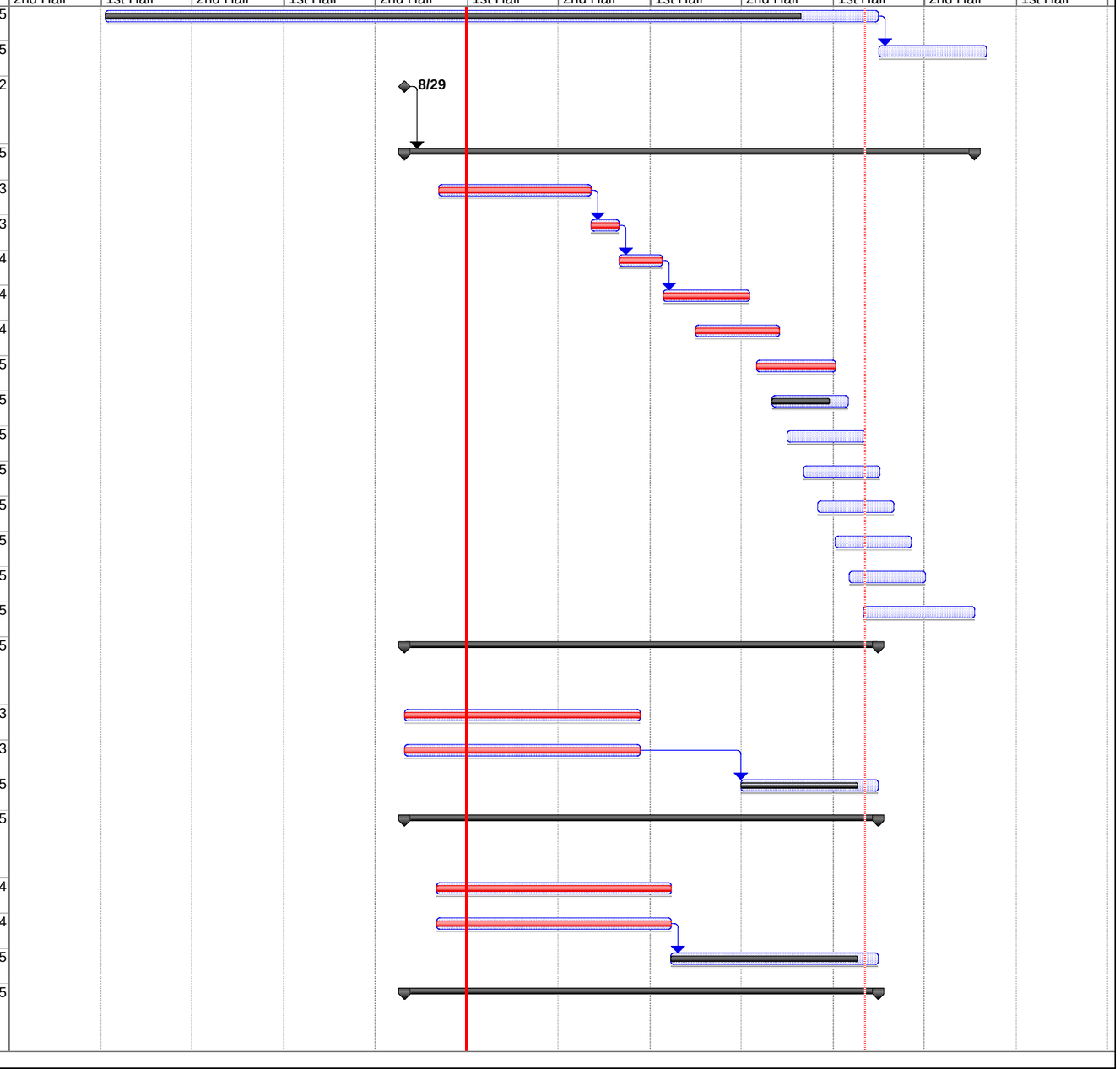
366	Five-Year Review Report Submittal to NYSDEC and EPA	1102 days	Mon 1/10/11	Tue 3/31/15
367	Acceptance of Five-Year Review Report	153 days	Thu 4/2/15	Mon 11/2/15
368	**Contract Modification 002: Revised Site Objectives and New Sites (Seven revised objectives and two new sites)**	0 days	Wed 8/29/12	Wed 8/29/12
369	**ST006-Building 101 Unrestricted Site Closure**	813 days	Wed 8/29/12	Fri 10/9/15
370	Conduct SVI Evaluation	218 days	Mon 11/5/12	Wed 9/4/13
371	Option 2 System Installation and Prepare Operation Plan	40 days	Thu 9/5/13	Wed 10/30/13
372	Operation Plan and Start Up Draft Report	62 days	Thu 10/31/13	Fri 1/24/14
373	Operation Plan and Start Up Final Report	124 days	Mon 1/27/14	Thu 7/17/14
374	SVE System Start Up and O&M Quarter 1 Report	120 days	Tue 4/1/14	Mon 9/15/14
375	SVE System O&M Quarter 2 Report	112 days	Fri 8/1/14	Mon 1/5/15
376	SVE System O&M Quarter 3 Report	110 days	Mon 9/1/14	Fri 1/30/15
377	SVE System O&M Quarter 4 Report	112 days	Wed 10/1/14	Thu 3/5/15
378	SVE System O&M Quarter 5 Report	110 days	Mon 11/3/14	Fri 4/3/15
379	SVE System O&M Quarter 6 Report	110 days	Mon 12/1/14	Fri 5/1/15
380	SVE System O&M Quarter 7 Report	110 days	Mon 1/5/15	Fri 6/5/15
381	SVE System O&M Quarter 8 Report	110 days	Mon 2/2/15	Fri 7/3/15
382	SVE System Rebound Monitoring and Report / Site Closure Report	160 days	Mon 3/2/15	Fri 10/9/15
383	**DP012-Building 301 Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
384	Conduct Site Investigation Activities	336 days	Wed 8/29/12	Wed 12/11/13
385	Remedial Action Activities	336 days?	Wed 8/29/12	Wed 12/11/13
386	Site Closure Report	196 days	Tue 7/1/14	Tue 3/31/15
387	**DP013-Building 255 Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
388	Conduct Site Investigation Activities	334 days	Thu 11/1/12	Tue 2/11/14
389	Remedial Action Activities	334 days	Thu 11/1/12	Tue 2/11/14
390	Site Closure Report	296 days	Tue 2/11/14	Tue 3/31/15
391	**DP015-Building 219 Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15



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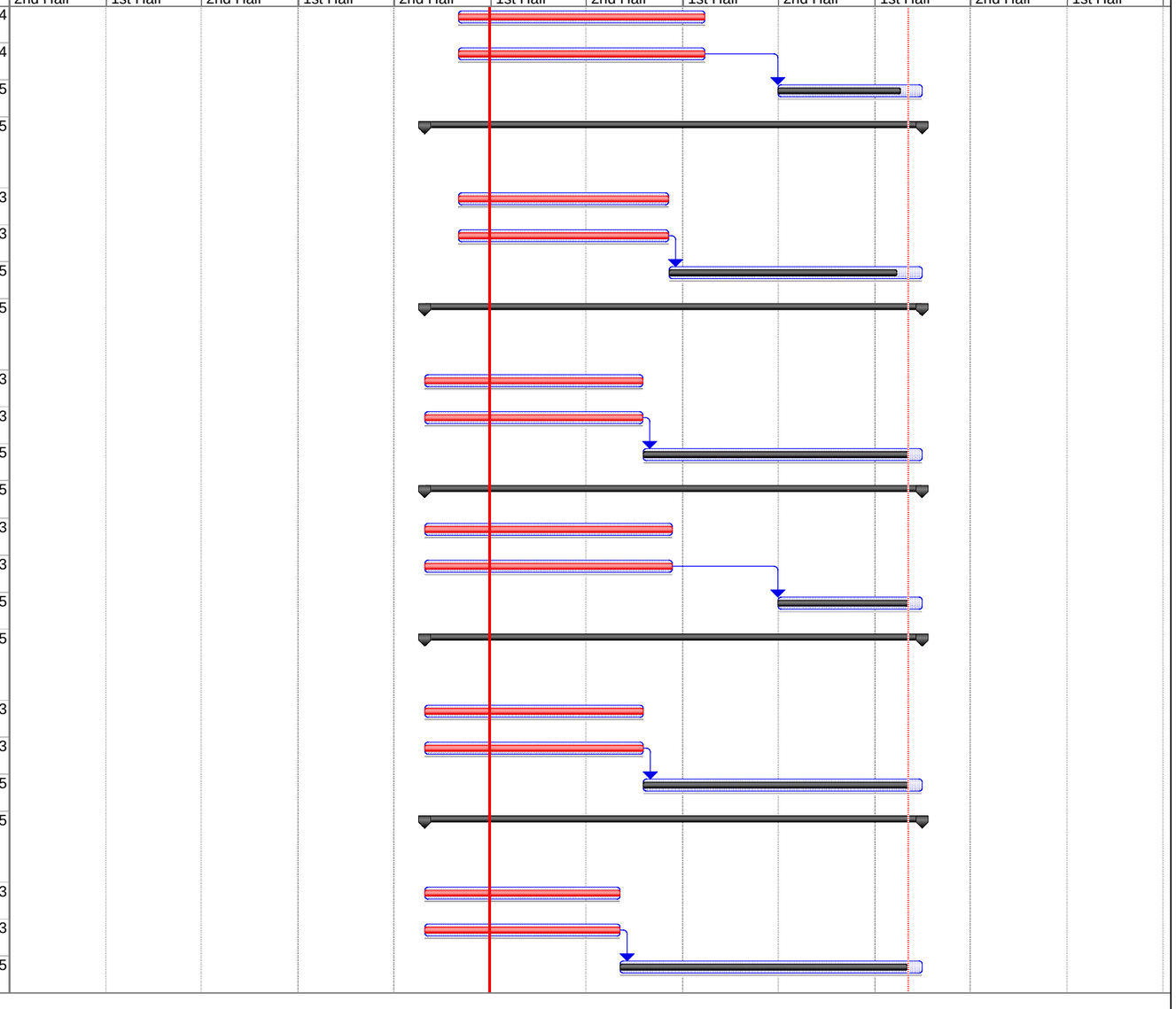
392	Conduct Site Investigation Activities	334 days	Thu 11/1/12	Tue 2/11/14
393	Remedial Action Activities	334 days	Thu 11/1/12	Tue 2/11/14
394	Site Closure Report	196 days	Tue 7/1/14	Tue 3/31/15
395	**SS024-Fire Demonstration Area Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
396	Conduct Site Investigation Activities	285 days	Thu 11/1/12	Wed 12/4/13
397	Remedial Action Activities	285 days	Thu 11/1/12	Wed 12/4/13
398	Site Closure Report	343 days	Fri 12/6/13	Tue 3/31/15
399	**SD050-Building 214 Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
400	Conduct Site Investigation Activities	296 days	Wed 8/29/12	Wed 10/16/13
401	Remedial Action Activities	296 days	Wed 8/29/12	Wed 10/16/13
402	Site Closure Report	378 days	Fri 10/18/13	Tue 3/31/15
403	**AOI 72 Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
404	Conduct Site Investigation Activities	336 days	Wed 8/29/12	Wed 12/11/13
405	Remedial Action Activities	336 days?	Wed 8/29/12	Wed 12/11/13
406	Site Closure Report	196 days	Tue 7/1/14	Tue 3/31/15
407	**Building 211 Drywell Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
408	Conduct Site Investigation Activities	297 days	Wed 8/29/12	Thu 10/17/13
409	Remedial Action Activities	297 days	Wed 8/29/12	Thu 10/17/13
410	Site Closure Report	378 days	Fri 10/18/13	Tue 3/31/15
411	**FT030- Fire Training Area Unrestricted Site Closure (Site Closure Pending)**	675 days	Wed 8/29/12	Tue 3/31/15
412	Conduct Site Investigation Activities	265 days	Wed 8/29/12	Tue 9/3/13
413	Remedial Action Activities	265 days	Wed 8/29/12	Tue 9/3/13
414	Site Closure Report	410 days	Wed 9/4/13	Tue 3/31/15



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